

AIDS-RELATED KNOWLEDGE, BELIEFS, SEXUAL PRACTICES, COMMUNITY  
PERCEPTIONS AND SELECTED ENABLERS OF YOUNG ADULTS IN EASTERN  
RURAL JAMAICA

By

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Complexity, simplicity, all rolled into one  
Playful, full of laughter, our Market Man  
Ken, Canute, Ken-Root, Rootisimus  
always planting seeds  
he loved the land and his family indeed!

In loving memory.....  
Canute Henry Morrison  
September 25, 1939 - October 26, 1997

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Abstract of Dissertation Presented to the Graduate School  
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Requirements for the Degree of Doctor of Philosophy

**AIDS-RELATED KNOWLEDGE, BELIEFS, SEXUAL PRACTICES, COMMUNITY  
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RURAL JAMAICA**

By

Sharon D. Morrison

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Chairperson: Dr. W. William Chen

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Young adults in rural Eastern Jamaica are at risk for HIV and AIDS when they engage in unsafe sex. Despite universal knowledge and awareness about transmission and protection, young adults still foster HIV/AIDS-related misconceptions, continue to underestimate their own vulnerability and tend not to alter unsafe practices. Using the PEN-3 model as a conceptual framework, the purposes of this study were to describe the AIDS-related knowledge, beliefs and sexual practices of young adults; to determine relationships between knowledge, beliefs and sexual practices; and to assess the nature and context of knowledge, beliefs and practices by exploring AIDS-related community perceptions and selected community enablers.

This descriptive and exploratory study utilized both survey and ethnographic field methods. The survey sample consisted of 58 young adults between 18 and 24 years old

who resided in the eastern parish of St. Thomas, Jamaica, and participated in a nationally derived youth program. The ethnographic study sample consisted of 10 young adults who participated in the survey and 7 community leaders who either work with HIV/AIDS issues or are leaders of youth group programs. Participant observation was conducted at points of condom acquisition and youth group sessions.

Descriptive statistics, t-tests, chi-square and correlational analyses were used to describe and evaluate relationships among the data relating to the first two questions. Ethnosemantic analysis was used to determine AIDS-related cultural domains and themes emerging from an assessment of community perceptions and selected community enablers. The PEN-3 framework was used to categorize themes as positive, existential and negative. Young adults were knowledgeable about HIV transmission, AIDS and self-protective actions. Young adults predominantly participated in vaginal sex. No significant relationship was found between knowledge, beliefs and the practice of safe sex. In addition, neither gender nor prior STD experience were found to be significantly related to safe/unsafe sex practice. Knowledge about HIV transmission was weakly, but positively related to knowledge about AIDS disease.

Reasons for unsafe sex include misconceptions about disease etiology, disregard for protective measures that conflict with cultural values, risk denial and partner pressures, trust and partner significance, accusations of promiscuity, lack of community endorsement of protective measures, and limited access to condom resources because of fear, embarrassment and physical placement within acquisition points. In addition, social and economic pressures, psychosocial issues, poor community participation and attitudes as

well as low educational levels all limit the effectiveness of existing HIV/AIDS prevention education designed to effect behavior change among young adults.

Themes such as the high levels of AIDS knowledge among young adults and the wide availability of condoms in the community represented positive, culturally empowering factors. Themes such as the belief that AIDS is caused by witchcraft (obeah) and the use of condoms to facilitate penetration during sexual intercourse represented existential factors that need not be targeted for change. Finally, themes such as the lack of condom use because of fear of accusation and poor community participation in prevention initiatives represented negative factors that act as threats to successful HIV/AIDS prevention initiatives for young adults.

## CHAPTER 1 INTRODUCTION

### Background of the Problem

AIDS has become a major cause of death of individuals residing in Jamaica, the largest of the English-speaking Caribbean countries (Hospedales, White, Gayle, Newton, Francis & Poumerol, 1992). In December, 1993, a total of 669 cases of AIDS were reported in Jamaica, representing a cumulative case rate of 28 per 100,000 population. This annual AIDS case rate has doubled every 2 years since 1982 (Figuroa, Braithwaite, Ward, DuCasse, Tscharf & Williams, 1995). The rates of AIDS cases were highest in the parishes of St. James and Kingston and St. Andrew (57 and 54 per 100,000 population respectively), Jamaica's major urban centers. It has been difficult to ascertain the actual numbers of HIV infected individuals. However, Jamaica recorded a total of 1278 cases of HIV infected individuals between the beginning of 1985 and December 1992. Eight hundred and seventy two (70%) of these cases were men and 373 (30%) were women. The age distribution of cases were as follows: 35% in those aged 20-29 years, 26% in those aged 30-39 years, 1.5% (18) HIV-infected children aged 1-9 years, 5.3% (62) teenagers and 16 individuals aged  $\geq 60$  years. Case rates were again highest in the parishes of St. James and St. Andrew (including Kingston) (103 and 76 per 100,000 population respectively) (Figuroa et al., 1995).

Although AIDS disease was initially found prevalent among homosexual and bisexual males, the disease is becoming prevalent among the young adult heterosexual population between the ages of 25 and 34 years old (Narain, Hull, Hospedales, Mahabair & Bassett, 1989). Five hundred and forty-two (approximately 25%) and 738 (approximately 34%) of the 2184 reported AIDS cases between January, 1982, and March, 1997, occurred in the 20 to 29 and 30 to 39 year old age ranges respectively. Given the 2 to 10 year incubation period of the AIDS virus, many of these individuals were likely to have contracted HIV in their younger years, when behaviors conducive to the sexual transmission of HIV are quite common. Thus, young adult heterosexuals appear to be the largest at-risk group within Jamaica.

As of March 1997, reported AIDS cases were highest (972 cases) in the parish of Kingston and St. Andrew (KSA). The AIDS case rate was 138.5 per 100,000 population (Ministry of Health, 1997). Although this area generally has a substantially higher prevalence of HIV infection and higher AIDS case rates than its surrounding rural areas, this pattern is in no way a universal one (Figueroa et al., 1995). Migration and population mobility for economic reasons and proximity to this major AIDS epicenter have strongly influenced the spread of HIV to nearby rural regions. Lower rates of infection are seen for example in nearby Eastern rural parishes but absolute numbers of HIV-infected persons in these rural regions are expected to equal or even surpass the number in the nearby urban center (Figueroa et al., 1995). Thus populations who reside within surrounding rural townships will find themselves at higher risk of exposure to HIV and AIDS.

Young adults who live in Eastern rural parishes close to the KSA AIDS epicenter are vulnerable to exposure to HIV and subsequent exposure to the health and social consequences of AIDS. For example, in the parish of St. Thomas (population approximately 84,000), the number of AIDS cases rose from 2 in 1990 to 52 in 1995 (St. Thomas Health Department, 1995). This represented an increase of over 200%. National studies, such as the 1987 Young Adult Reproductive Health Survey and the 1993 Contraceptive Prevalence Survey, reported that young adults in these regions, despite an awareness of AIDS, still participated in activities that increased their vulnerability to AIDS (National Family Planning Board; McFarlane, Friedman & Morris, 1994). The studies also reported that despite participant awareness of the association between condomless sex and HIV transmission, condom use rate for the participants was only 30%. More than half of these same study participants believed they were at little or no risk for exposure to or infection with HIV (Morris, Sedivy, Friedman & McFarlane, 1995).

#### Statement of Research Problem

Young adults in Eastern rural parishes of Jamaica face vulnerability to economic and social disempowerment as a result of poverty, unemployment and limited educational opportunities (Planning Institute of Jamaica, 1992; 1994). The increasing incidence of HIV and AIDS in this region creates an additional vulnerability issue for these young adults. National surveys such as the 1987 Young Adult Reproductive Health Survey and the 1993 Contraceptive Prevalence Survey reported that young adults still foster beliefs and engage in sexual practices which place them at risk for exposure to HIV and

consequently development of AIDS (National Family Planning Board, 1988; McFarlane et al., 1994). Many still see themselves at little risk for contracting HIV, despite low or no practice of self-protective measures such as condom use during sex (Morris et al., 1995). Little, if any, theoretically based contextual research has been done to assess AIDS-related knowledge, beliefs and sexual practices specific to young adults residing in Eastern rural Jamaica. This presents a knowledge gap not only in terms of understanding AIDS-related knowledge, beliefs, sexual practices, and any existing relationships between them, but also in understanding the nature and local context in which these entities are produced and maintained.

National as well as local HIV/AIDS prevention specialists, public health professionals and community youth groups and program organizers would greatly benefit from baseline research that focuses on uncovering local models of, and meanings behind, existing knowledge, beliefs and sexual practices. The results could facilitate the development and inclusion of theoretically driven and culturally appropriate HIV/AIDS prevention education for high-risk behavior modification. Since no preventive vaccine or medical cure for AIDS exist, efforts to (1) improve upon knowledge and awareness, and promote positive practices, and (2) facilitate transformation or change of negative sexual practices via health education strategies remain the only viable means of preventing HIV spread and AIDS. Specifically, this study focused on describing the AIDS-related knowledge, beliefs and sexual practices of young adults between 18 and 24 years old, who reside in the Eastern rural parish of St. Thomas. The study also identified relationships between knowledge, beliefs and practices, and examined the nature of each



within the context of AIDS-related community perceptions and selected enablers. Quantitative information was collected via survey regarding knowledge about HIV transmission, AIDS and self-protective actions; beliefs about the importance of AIDS; beliefs about personal vulnerability to HIV/AIDS; participation in vaginal, oral and anal sex; participation in vaginal, oral and anal sex without a condom over the past year; participation vaginal, oral and anal sex without a condom over the past month. Qualitative information regarding the nature and context of knowledge, beliefs and sexual practices was collected via a rapid ethnographic assessment of AIDS-related community perceptions and selected enablers.

### Conceptual Framework

Existing health education theories and models, for example, the Health Belief model (Rosenstock, 1974), Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Social Cognitive Theory (Bandura 1977, 1986), have been designed to elucidate the psychosocial predictors of health behavior. Many propose linear relationships among constructs and fail to capture and comprehensively assess non-linear relationships that occur as a result of the cultural context in which these constructs are derived (Glanz, Lewis & Rimer, 1996). This can result in contextual misunderstanding and non-comprehensive analysis of health-related beliefs and behaviors. Consequently, health education initiatives which are guided by these theories may lack what Airhihenbuwa (1995) referred to as *cultural sensitivity and cultural appropriateness*.

The PEN-3 model, derived by Airhihenbuwa (1989; 1990-1991; 1992; 1993; 1995) proposes a more culture-centered conceptual approach to description and assessment of health-related knowledge, beliefs and behaviors. This model offers a space within which cultural codes and meanings behind specific beliefs and practices can be incorporated into not only the understanding of the beliefs and behavior, but the development, implementation and evaluation of health education initiatives designed to address beliefs and behaviors that need to be changed or transformed.

The model shows that characterization of health beliefs and behaviors can be viewed in 3 dimensions: *health education*, *educational diagnosis of health behavior*, and *the cultural appropriateness of health behavior*. These are dynamically interdependent and interrelated. Each dimension is separated into 3 broad categories, hence the acronym PEN ( See Figure 1) (Airhihenbuwa, 1995).

The first, *health education* consists of the following:

**Person--**The individual should be empowered to make informed health decisions, appropriate to their roles in the family and community.

**Extended Family--**Health education should be concerned not only with the nuclear family, but also with extended kinship. The focus should take into consideration family lineage (e.g. patrilinear or matrilinear). If a program is designed to target a particular member of the family, the individual should become the focus of the study and must be recognized. Such recognition must be noted within the context of the individual's environment.

**Neighborhood--**Health education must be committed to promoting health and preventing disease in neighborhoods and communities. Involvement of community members and leaders becomes critical in providing culturally appropriate initiatives.

The second, *educational diagnosis of health behavior* involves assessing factors that influence individual as well as family and community health beliefs and behaviors. This

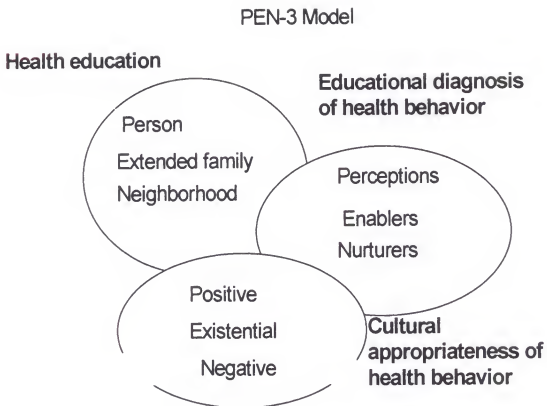


Figure 1. The PEN-3 Model. From "Health and Culture: Beyond the Western Paradigm," by C. O. Airhihenbuwa, 1995, p.30

portion of the model evolved from a confluence of three predominant health education frameworks, the *Health Belief Model* (Rosenstock, 1974; Rosenstock, Strecher & Becker, 1988), the *Theory of Reasoned Action* (Fishbein & Ajzen, 1975), and the *PRECEDE/PROCEDE Model* (Green & Kreuter, 1991). The following are the factors of this dimension:

**Perceptions**--These are knowledge, attitudes, values, and beliefs, within a cultural context, that facilitate or hinder personal, family, and community motivation to change. Existing perceptions may lead to the need to resolve conflicts that might arise in people's minds regarding a specific disease.

**Enablers**--These are cultural, societal, systematic, or structural influences or forces that may enhance or act as barriers to change.

**Nurturers**--These relate to the degree to which health beliefs, attitudes and actions are influenced or mediated by family, extended kin, friends, peers and the community.

The final component, *cultural appropriateness of health behavior*, is the most critical dimension of the model as it places *culture* within dynamic and interacting forces that manifest themselves through beliefs and behaviors. It contains the following:

**Positive Behaviors**--These are based on beliefs and actions that are known to be beneficial and must be encouraged. Affirming these beliefs and behaviors is very critical to health education program success and sustainability, particularly since these represent a cultures' contribution to global production of knowledge and meaning.

**Existential Behaviors**--These include beliefs and practices that are indigenous to a group and have no harmful health consequences. Thus they need not be targeted for change, or be blamed for program failure.

**Negative Behaviors**--These are based on health beliefs and actions that are known to be harmful to health. These must understood within their cultural, historical, and political context before attempting to change them.

### Application of the Model

Since this study was exploratory in nature, the model and its components served only as a conceptual “road map” for assessment than for prediction among the study variables. The dimensions of the PEN-3 model formed the basis of (1) a description of “what is,” that is, describing existing knowledge, beliefs and sexual practices and their relationships, and (2) an exploration of the cultural context of existing knowledge, beliefs and practices.

#### Dimension 1: Health Education

HIV/AIDS Education. The outcome of the study was (1) identification of contextual issues associated with HIV/AIDS and young adults in a rural Jamaican setting and (2) presentation of a set of recommendations that could assist in further research on HIV/AIDS and the development of culturally relevant HIV/AIDS education for reducing vulnerability among young adults in Eastern Jamaica. This helps to ensure that cultural and structural experiences of young adults are considered and integrated into efforts to promote beneficial beliefs and practices and changing of harmful beliefs and practices (Airhihenbuwa, 1995).

#### Dimension 2: Educational Diagnosis of Health Behavior

AIDS-related knowledge and beliefs. National studies report that despite moderate levels of awareness of HIV transmission modes and AIDS preventive actions, several myths about AIDS persist. In addition, young adults still believe they are at low risk for contracting HIV, despite low frequency sex with condoms (Morris et al., 1995). Knowledge about HIV transmission, AIDS disease, self-protective actions as well as

beliefs about the relative importance of AIDS and personal vulnerability to HIV/AIDS all act as facilitators of or hindrances to participation in sexual practices conducive to HIV transmission. Young adults must possess a certain level of knowledge and beliefs in order to make decisions regarding their sexual practices. A description of knowledge and beliefs among young adults in Eastern rural Jamaica is necessary to identify similarities and differences in biomedically accepted knowledge and beliefs. Relationships between knowledge, beliefs and practices must also be assessed. Behavior modification or transformation strategies can prudently be facilitated when there is resolution of conflicting beliefs among these young adults.

Sexual practices. Research on the sexual behavior of Jamaicans identifies the practice of unsafe sex (sex without a condom) as a major factor in HIV transmission among young adults (Chevannes, 1992; 1993; LeFranc, Wyatt, Tucker & Bain, 1994; McFarlane et al., 1994; National Family Planning Board, 1988; Wyatt, LeFranc & Tucker, 1992). It is important to identify existing patterns of sexual practices among young adults in Eastern rural Jamaica that are related to vulnerability to HIV. Changing or modifying identified harmful practices can reduce vulnerability to HIV and AIDS.

Community perceptions. An assessment of traditional and emergent perceptions regarding AIDS, sex and condoms in the rural setting is vital to understanding how disease perceptions and related practices develop and are maintained. What young adults in Eastern rural Jamaica know, believe and practice will be strongly influenced by what they see and hear within their own community.

Enablers. Condom resources (availability and accessibility of condoms) within the local community are vital to facilitating sex with condoms as a vulnerability reduction

method. If condoms are unavailable or inaccessible, then the likelihood of them being used would be low among young adults. Altering or adapting the condom environment to better allow for better availability and greater access can prove to be an effective strategy for preventing the sexual transmission of HIV.

Community HIV/AIDS prevention, such as HIV/AIDS education for youth groups within the community, must be assessed as a means of evaluating what has proven to be effective and/or ineffective. Evaluation can lend insight into what additional strategies are needed in the future.

Nurturers. STD prevention workers, public health personnel, youth group leaders, youth program coordinators, peers and family all influence the social production of knowledge, attitudes, beliefs and behavior. Their opinions, ideas, and thoughts need to be solicited to lend meaning and context to AIDS-related beliefs and sexual practices among young adults. Nurturers influence the likelihood of behavior change or decision towards altering beliefs and sexual practices. If nurturers perceive AIDS as an important threat to young adults in the community, then this may facilitate community participation in reducing vulnerability among this population. If sex with condoms is an accepted and endorsed method of prevention by community nurturers, then it may become a more accepted and frequent practice among the young adults.

### Dimension 3: Cultural Appropriateness of Health Behavior

Information obtained from exploring AIDS-related community perceptions and enablers provides a means for identifying the role of culture in knowledge, beliefs and practices. These entities may then be viewed in terms of being *positive* (beneficial),

*existential* (neither good nor bad) and *negative*(harmful). This facilitates identification of (1) knowledge, beliefs, practices that may need to be targeted for modification or complete change, and (2) knowledge, beliefs and practices that need to be reinforced or encouraged. Each can then be situated within the context of being deeply rooted in the tradition and culture, or new and emergent, with the possibility of becoming part of long term tradition. This helps to conceptually create the local context of AIDS-related knowledge, beliefs and sexual practices among young adults in Eastern rural Jamaica.

### Purpose of the Study

Ultimately, this study presented an assessment of AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica, by developing a local picture based on the PEN-3 conceptual framework. It also identified emergent themes related to HIV/AIDS and young adults that require more in-depth assessment. Specifically, the study (1) described the AIDS-related knowledge, beliefs and sexual practices of 18 to 24 year old young adults residing in the Eastern rural parish of St. Thomas, Jamaica, (2) identified relationships between AIDS-related knowledge, beliefs and selected sexual practices, and (3) explored AIDS-related community perceptions and selected enablers in order to assess the local nature and context of knowledge, beliefs, practices and the relationships among them.

### Research Questions

Three primary research questions were formulated to explore this problem:

1. What are the AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica?



2. Is there a relationship between AIDS-related knowledge, beliefs and selected sexual practices?
3. What does a rapid ethnographic assessment of AIDS-related community perceptions and selected enablers reveal about the nature and context of AIDS-related knowledge, beliefs, sexual practices, and their relationships?

### Conceptual Definitions

“Young Adults” were defined as individuals between the ages of 18 and 24 years old.

“AIDS-Related Knowledge and Beliefs” included knowledge and beliefs about (1) HIV transmission, (2) AIDS disease, (3) AIDS self-protective actions, (4) the importance of AIDS, and (5) personal vulnerability to HIV/AIDS.

“Sexual Practices” included (1) participation in vaginal, anal and oral sex, (2) participation in vaginal, oral and anal sex without using a condom over the past year and (3) participation in vaginal, oral and anal sex without using a condom over the past month.

“Community Perceptions” referred to the expressed opinions and beliefs of key community informants regarding (1) HIV/AIDS and young adults, and (2) norms for sexual activity and condoms.

“Community Enablers” were cultural and structural forces within the community that may enhance or be barriers to the modification, transformation or complete change of AIDS-related knowledge, beliefs or sexual practices that permit vulnerability to HIV/AIDS. These included community condom resources and HIV/AIDS prevention education.

“Condom Resources” was defined as the availability and accessibility of condoms within the community.

“HIV/AIDS Prevention Education” referred to HIV/AIDS education for youth groups in the community.

### Significance of the Study

While sexual abstinence is the most obvious method of preventing sexual transmission of HIV, a substantial portion of young Jamaicans find this an impractical strategy to adopt (Chevannes, 1993). The expectation that most sexually active young adults will routinely adopt sexual abstinence as an HIV prevention strategy is, in fact, an unrealistic one. Consequently, for those young adults who are not celibate, appropriate and consistent use of condoms during sexual activity represents a more effective strategy for reducing the risk of exposure to HIV. AIDS-related knowledge, beliefs and sex with or without using condoms all occur within the context of personal disease perceptions, interpersonal and sexual relationships, and the local sociocultural environment in which young adults reside. Several of these act as obstacles to curtailing the spread of the AIDS epidemic among young adults in rural Jamaica.

The study shifts the focus from at-risk groups in urban settings to those in a rural setting. Baseline data are provided regarding the knowledge as well as the types and frequency of beliefs and practices among young adults who reside in a rural region that borders one of Jamaica's major AIDS epicenters. Since there is currently no preventive vaccine or known cure for AIDS, local public health professionals, AIDS prevention workers as well as youth group leaders and program developers would greatly benefit

from the results of this study. The findings could (1) guide larger, more in-depth studies or assessments of elucidated issues related to HIV transmission in rural settings, and (2) provide insights into more effective HIV/AIDS education and behavioral change strategies in rural Jamaica.

Researchers agree that HIV/AIDS research with Jamaicans must focus on the contextual issues affecting sexual transmission of HIV (Wyatt, Le Franc & Tucker, 1992). The study employs a conceptual framework whose dimensions have been extended to incorporate a culture-centered approach to assessing contextual features of AIDS-related issues among young adults. The PEN-3 model is essentially a framework for assessment and cultural understanding. The range of AIDS-related knowledge, beliefs and sexual practices seen among young Jamaicans is determined by the range of cultural and structural factors these individuals must encounter in their daily lives. An exploratory study of this scope will not, in and of itself, alter these factors. But use of the PEN-3 model will provide a basis from which these factors can begin to become recognized, understood and incorporated into more realistic assessment of what actually occurs. In other words, the PEN-3 model will assist in elucidating the contextual features of and meaning behind knowledge, beliefs and practices related to disease and illness.

This study incorporates contextual issues along with assessment of epidemiological variables. It facilitates further demonstration of the utility of integrating quantitative and qualitative approaches in the study of complex behavior related to disease causation. When survey and ethnographic field methods are employed, a much more complete picture of the situation can be obtained. The quantitative data produced by the

survey help to determine statistical trends as well as the range of knowledge and the predominant types of beliefs and practices. The qualitative data produced by the ethnographic field methods provide insight into the cultural features of disease related knowledge, beliefs and practices.

Finally, the study provides a means for documenting the concerns of the young adult population, as expressed by the young adults themselves and members of their community. This is a critical step in fostering a collaborative atmosphere among local people, public health and other professionals, researchers and program developers at the microlevel and proponents of national HIV/AIDS prevention initiatives at the macrolevel. All can work toward the development of transferable local HIV/AIDS prevention strategies as part of an agenda to promote economic and social empowerment of young adults in other communities within Jamaica and similar regions throughout the English-speaking Caribbean.

#### Delimitations

1. The findings were delimited to a small group of young adults between the ages of 18 to 24 years old who reside in Eastern rural Jamaica and are participants in the National Youth Service (NYS) Program. This national program is sponsored by the Ministry of Education, Youth and Culture of Jamaica and administered through the Social Development Commission located in each parish. Young adults in the NYS participants in Eastern rural Jamaica are similar to their young adult counterparts in other regions throughout the country.
2. Data were collected between May, 1997, and August, 1997.

### Limitations

1. Young adults in Jamaica are by no means a homogenous group. Therefore, the results of this study are not generalizable to the national population. Findings may be generalizable only to young adults in Jamaica, who share the same sociocultural and structural characteristics as those participating in the study.
2. The expressed opinions and perceptions solicited from key informants in the study were delimited only to members of the St. Thomas community and do not necessarily reflect of those of the larger Jamaican community.
3. Face-to-face surveys are intrusive and often require that highly sensitive information, such as sexual practices, is revealed to the interviewer. Young adults who participated in the pilot survey from this study may have been biased towards answering in a socially acceptable manner.
4. The role of the researcher is critical in the ethnographic research process, particularly since the researcher acts as the primary instrument for data collection and interpretation. Beliefs and assumptions of the researcher bring certain idiosyncratic biases to the study. Every effort was made to maintain objectivity; however, it must be noted that researcher biases may shape the way the data were collected and interpreted.
5. The length of fieldwork and financial resources for this study only permitted a rapid exploratory assessment of the variables and themes outlined in the study.

### Assumptions

1. Young adults who participated in the study adequately represented the population of young adults residing in the region under study.
2. The key informants who participated in the study adequately represented the population of individuals who were aware of young adult and HIV/AIDS issues within the community.
3. The extent to which participants were candid in answering questions was adequate for the purpose of this study.
4. The data collected during fieldwork was adequate for the purpose of the study.

## CHAPTER 2 REVIEW OF LITERATURE

### Introduction

The purpose of this chapter is to present an overview of the distinctive features of AIDS within the Jamaican context. The chapter is structured in terms of several broad sections. Information about the Jamaican sociocultural environment, the epidemiological aspects of HIV and AIDS in Jamaica and perceptions of health, sexuality and their relevance to the AIDS epidemic is first presented. A review of previous research on sexual behavior among young Jamaicans as it relates to the AIDS pandemic is then presented. A discussion of past and current AIDS intervention initiatives for Jamaicans in general is also presented. The chapter also examines the utility of the PEN-3 model. The concluding portion of this chapter summarizes the information presented in this section and further reiterates the importance and significance of a culture-centered conceptual approach to assessment of AIDS-related issues.

### Sociocultural Setting

Jamaica is an island in the northern Caribbean Sea, approximately 160 km south of Cuba. It is divided into 14 parishes each with its own capital city, Kingston (See Figure 2). Kingston, and the surrounding parish of St. Andrew are home to more than a quarter of the nation's population (Bayer, 1993). Slightly more than half of the population is below the age of 25 years (Pan American Health Organization, 1995).

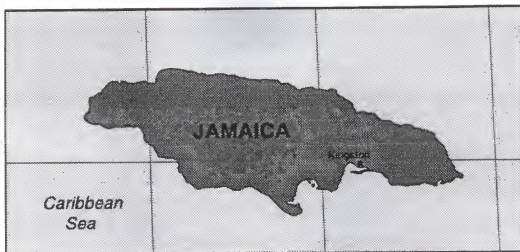


Figure 2. Map of Jamaica

Life expectancy at birth is approximately 68.1 years for men and 76.2 years for women (Pan American Health Organization, 1995). Infant mortality is low, approximately 12 deaths per 1000 live births, and maternal mortality is approximately 115 per 100,000 live births (Center for International Health Statistics, 1995). In 1987, the five leading causes of death reported for all ages in the population (including children under 15 years) were malignant neoplasms, heart diseases, cerebrovascular diseases, diabetes, and accidents and violence (Pan American Health Organization, 1995). Although Jamaica's health statistics have steadily improved, chronic diseases and sexually transmitted diseases including AIDS, continue to present significant problems for the population (United States Agency for International Development, 1996).

The country is a multiracial society of approximately 2.5 million people, the majority (76.3%) of whom are of African origin (Bayer, 1993). The rest consists of several other ethnic groups including Afro-Europeans (15.1%), Chinese and Afro-Chinese (1.2%), East Indians and Afro-East Indians (3.4%), Europeans (3.2%) and other (0.8%)



(U.S. Department of State, 1995). Each group represents a part of the rainbow stripes that constitute culturally pluralistic society. Cultural life is rich and varied, and many countrymen view the island as the cultural heart-land of the English-speaking Caribbean. Popular culture is the product of a vigorous arts and cultural movements, as well as transglobal influences as a result of improved worldwide communications (U.S. Department of State, 1995). The historic linkages between color and class have had profound effects on contemporary social institutions within Jamaica. This often lead to stressful cultural contacts between Jamaicans of all complexions. These class and racial distinctions, however, are becoming reduced through increased social mobility as a result of increased education and opportunities for property ownership (U.S. Department of State, 1995).

A range of family and kin structures exist in relation to socioeconomic status (SES) or social class. For those in the higher SES, the family unit is usually a nuclear one and marriage is usually a legal union according to the predominant Christian principles (Phillips, 1976). Sexual monogamy is usually stressed and illegitimacy often carries a social stigma with it for those in the higher SES. Family structure in the lower SESs usually is an extended one including parents, children, grandparents, aunts, uncles and cousins. Consensual unions (common-law marriages) are often the economic order of the day and extra-residential mating is accepted (Chevannes, 1993). Illegitimacy in the lower SES carries little or no social stigma and children from previous unions form part of the extended family circles (Phillips, 1976).

Religion plays a major role in Jamaican society, especially in the lives of rural communities. The largest established church is the Anglican church (Church of England),

followed by many Baptist sects, Roman Catholic and Methodist churches. There are also Muslim, Hindu and Jewish groups. More popular in rural settings are the Evangelical and Revivalist sects (Bayer, 1993). Festivals, celebrations and artistic expressions of cultural life, which actively involve institutions such as churches and schools, have continued to develop under the active sponsorship of the government and private sector, has also greatly influenced Jamaican popular culture. Reggae music, which has become the signature music of the island, is largely based on Rastafarianism, a religion that has developed out of resistance to mainstream society and is based on its appeal to black consciousness, and Rastafarian ideology and imagery (Bayer, 1993).

The formal educational system is fashioned around government supported primary, all-age and secondary schools. Individuals who wish to enter the secondary or high school level must pass what is known as the Common Entrance Examination (CEE). Only approximately 10,000 of the 100,000 students who take this exam end up with a place in high school. A smaller percentage (<1.5%) will proceed to tertiary level institutions. The continuing decline in the basic educational level of many young Jamaicans is of extreme concern. Low educational attainment status compromises the ability of the workforce to build a modern growth-oriented economy (United States Agency for International Development, 1996).

Economically, Jamaica is dependent on foreign credits which have placed it in debts that have amounted to more than \$3.6 billion, the servicing of which currently consumes 49% of the country's budget (U.S. Department of State, 1995). These debts have impacted society and has resulted in forced cuts in government expenditure on basic infrastructure such as public transport, health care, education and imports of basic

commodities. The general cost-of- living in Jamaica is high, affecting mostly the poorest of Jamaicans. Currently, one in three households is living below the poverty line (Bayer, 1993). Jamaica's political scene has long been dominated by a two party political system: the People's National Party (PNP) or socialist party and the Jamaica Labour Party (JLP) or capitalist party, (Floyd, 1979). The influence of this system of partisan politics on Jamaican daily life and island culture is palpable to the extent that neighborhoods and country districts are divided up into PNP or JLP "districts" or "garrisons" (Bayer, 1993).

#### Epidemiological Aspects of AIDS in Jamaica

The Caribbean Epidemiology Center (CAREC) is responsible for the collection and analysis of communicable disease data in 19 Caribbean countries (Narain et. al., 1989). CAREC began AIDS surveillance in 1982 and member countries have routinely reported AIDS cases and serology data on a quarterly basis since 1985. Most of the AIDS cases originally reported occurred in five major countries: the Bahamas, Barbados, Bermuda, Jamaica and Trinidad and Tobago. Jamaica reported its first confirmed case of AIDS in 1982. The individual was a male homosexual who had been diagnosed in New York and had returned home to die (Narain et al., 1989). The first reported case of AIDS in a woman occurred in 1987. The individual was the common-law wife of a migrant farmworker from rural Jamaica who appeared to have been infected by her husband (Figueroa et al., 1995). Although the first pediatric case of AIDS in Jamaica died in 1986, it was not reported until 1987. Approximately 55 pediatric AIDS cases have been reported since then, representing 8.2% of all cases (Figueroa et al., 1995). HIV infection was

acquired through vertical transmission in all but one case, where the child was a hemophiliac (Figueroa et al., 1995).

Jamaica recorded a total of 1278 cases of HIV infected individuals between the beginning of 1985 and December 1992 (Figueroa et al, 1995). Eight hundred and seventy two (70%) of these cases were men and 373 (30%) were women. The age distribution of cases were as follows: 35% in those aged 20-29 years, 26% in those aged 30-39 years, 1.5% in HIV-infected children aged 1-9 years, 5.3% in teenagers and 1.2% in individuals aged  $\geq 60$  years. Case rates were highest in the parishes of St. James and Kingston and St. Andrew (103 and 76 per 100,000 population respectively) (Figueroa et al., 1995). The prevalence of HIV infection among young adults was estimated at between 2 and 4 per 1000.

By the end of 1993, approximately 669 AIDS cases were reported in Jamaica. This represented a cumulative AIDS case rate of 28 per 100,000 population. This annual AIDS case rate has doubled every 2 years since 1982 (Figueroa et al., 1995). The rates of AIDS cases were highest in the parishes of St. James, and Kingston and St. Andrew (57 and 54 per 100,000 population respectively). The place of acquisition of HIV was recorded for 369 adult AIDS cases. The reports indicated that 77% were infected locally and 23% were infected while living or visiting the United States. Men were significantly (20-34%) more likely to have been infected overseas than women (4-6%) (Figueroa et al., 1995). All initial AIDS patients in Jamaica acquired their infection abroad, mainly in the United States. The cases were found in almost equal numbers of homosexuals and heterosexuals. Many were migrant farmworkers from Belle Glade, West Palm Beach county, Florida, USA (Figueroa, 1989).

The epidemiological pattern of AIDS in Jamaica differs from that seen in the United States. Until 1985, there was a clearly marked pattern of HIV infection within the homosexual community. However, between 1985 and 1987 a shift towards heterosexual transmission of the virus occurred. Data collected from reports also suggested that heterosexual transmission is twice as common as homosexual transmission (Figueroa, 1989). The major risk groups identified with the heterosexual transmission of HIV include migrant farm workers, prostitutes and sailors who frequently dock at some of the island's ports (Figueroa, 1989). An additional risk group are informal commercial importers (higglers) who have allegedly participated in sexual activity while abroad in exchange for foreign currency to purchase goods (Figueroa et al., 1995).

In 1989, there were 8 documented cases of pediatric AIDS and each child acquired HIV through maternal transmission (Figueroa, 1989). This pattern was consistent with the pattern of heterosexual HIV transmission seen, with only one of the mothers acquiring the infection through intravenous drug abuse (Figueroa, 1989). There have been to date, only two documented cases of HIV infections being transmitted through blood supply that occurred before the implementation of mandatory screening of all donor blood in December of 1985 (Figueroa, 1989).

### Health, Sexuality and HIV/AIDS

Anthropologists have concluded that sexuality is not a "thing" in itself. They suggest that an analysis of sexuality yields three distinct, discernible layers: 1) kinship and inheritance patterns that actually integrate family members and their sexuality into national and even international movements in law and class, 2) communities that are the termini of

world-wide economic, social, political, and cultural systems and, 3) world systems including universal religions as well as increasing intervention of the state into its personal arena (Caplan, 1987). Other social scientists define sexuality as an integral part of identity on both a personal and a sociocultural level; it is part of being male or female, as well as adult (Caplan, 1987).

Sexuality, as defined in Jamaica, is usually conceptually linked with the desire to create children. "For both men and women, perceptions of self identity and social power are contingent upon the expression of sexual potency which is confirmed by the birth of a child" (McCormack and Draper, 1987). Sex and birth are both an affirmation by the self and by the society at large, that adulthood is being or has been achieved. The big step into adulthood signifies that social influences may be extended through sexual relationships, birth of children, and the building of social networks. MacCormack and Draper (1987) studied sexuality within the Jamaican cultural context. They found that sex and childbirth are seen as healthy and natural, and that girls want to become complete women as soon as possible. The doctrine of "naturalness" (free expression of sexual nature) discourages premeditated contraception and schoolgirl pregnancies abound, in most cases ruining hopes for further education and social mobility (MacCormack & Draper, 1987).

Health has sexual and physical connotations for Jamaicans. Both men and women depend on physical signs to reassure themselves that they are sexually healthy. To have sexual intercourse is to avoid the danger of blocking up natural vitality and therefore it promotes health. In one study, some Jamaican males expressed the feeling that sexuality was an essential for good mental health (Brody, 1981). There is of course, gender asymmetry and bias, both being imposed by the society at large. For men, sexual

intercourse is a good and innate thing. For women , sexual intercourse for the purpose of childbearing is a good and healthy thing. Women who do not release natural vitality by having children may suffer ill-health manifested by nervousness or headaches or even become insane (Brody, 1981).

Although there is previous mention of sexuality, in terms of “heterosexual” relations, homosexuality is also an integral part of constructing Jamaican sexuality. Male homosexuality stays, for the most part, latent or hidden. Jamaicans openly express their opinion that heterosexual unions are proper and that homosexuality is so aberrant that those engaging in it should be killed. Jamaicans do admit that they believe that men need sexual release but even when women are not “plenty,” homosexuals bring “disgrace” to their communities (Sobo, 1993). The culturally generated ideas about lesbians, in which one must be “man” and penetrate the other during sex, follow and perpetuate the cultural model for heterosexual interaction in which “the penis is a great thing” and one for which nothing can substitute (Sobo, 1993).

Lesbians are referred to as “sodomites” and gay men as “batty boys” or ‘batty men.” (The term ‘batty’ is a colloquialism for ‘buttocks’). Both sets are believed to enjoy “plenty” sex and tend to be very selfish, jealous people. Jamaican tabloids such as the Jamaican Enquirer and the X-News constantly publish voyeuristic tales of gay and lesbian passions which illustrate the consequences of allowing self-centered sexual ‘craveness’ (greed) and jealousy to “get out of hand” (Sobo, 1993). The frequency of homosexuality is difficult to determine as such behavior is scorned. Admissions would bring ostracism from the public and even the risk of being murdered.

The cultural construction of AIDS disease in developing countries such as Jamaica has centered around what was pictured as the high risk culture of gay men (Schiller, N. G., Crystal, S. & Lewellen, D., 1994). As the epidemic progressed, the focus on the perceived deviant sexual behaviors of homosexual men served to distance both AIDS and homosexual men from the general Jamaican population. A 1993 broadcast by Trans World Radio (Bonaire) featuring comments from Jamaica's Health Minister, Easton Douglas, confirms this opinion:

When you're dealing with HIV and AIDS, you are dealing with something that is sometimes difficult to speak about because you are speaking about sexology and sex, and in the Caribbean that is still a sensitive thing to talk about. People have developed severe hostility to AIDS victims they know about. Some of them have been burned out of their homes. They have lost their jobs.

Jamaicans have expressed the belief that vaginas are built to take in semen and that AIDS is a problem for homosexual men because semen, which normally move from the penis to the vagina, has no natural destination when ejaculated into the anus (Sobo, 1993). The rectum, in their opinion, does not have an easy opening like the vagina for draining out matter that lingers. Men do not have a natural monthly 'washouts' like menstruation which aids in this cleansing process. As a consequence, semen entering the male rectum always gets lost inside and rots, causing AIDS (Sobo, 1993). Anal intercourse, as practiced by these homosexual men, harms the body. Its immorality makes it dangerous. It constitutes a behavioral infarction against moral order in which only heterosexual sex that can lead to procreation is acceptable. It violates the understanding that "humans should be custodians for the bodies GOD lends them." In the minds of many Jamaicans, those who traumatize the body unduly are "careless" and so less deserving of divine protection (Sobo, 1993).



The anxiety sparked by AIDS epidemic among the so called general Jamaican population, is not only a fear of the epidemic 'breaking' out of the cultural and social ghettos of homosexual men, but a fear of the spread of "deviance," immorality and unGODliness among the communities. In other words, "the unhealthy, contagious, sexually deviant--all condensed from the negative symbolism of AIDS--[these] have become images which are mobilized as part of a cultural politics of reconstructing the self" (Crawford, 1994).

#### Young Adults and the AIDS Pandemic

The estimated 8 to 10 year incubation period between HIV infection and AIDS disease manifestation, indicates that many of those individuals within the age range of 20 to 39 years old, may have been infected during their adolescent and young adult years. An analysis of cases reported by Jamaica to CAREC during the period between 1982 and 1993 revealed that many of the AIDS cases occurred primarily in young to middle aged adults. Males appeared more likely to have AIDS than females (Figueroa et al., 1995). The numbers in the teenage to young adult age ranges are increasing and concern is now being directed towards the adolescent and young adult population whose current sexual practices are considered a major risk factor for the spread of HIV infection (Figueroa et al., 1995).

Jamaican agents of culture, such as family and kinship patterns, religion, school, and economic and political situation, all work together to try to enforce the concept of a seemingly monogamous society. This ideal is accepted or rejected to varying degrees in the different strata of society. A study done, in the mid 1970s, of young people between

the ages of 15 and 19 who were from working and middle class families, revealed that 75.6% of youths from the working class saw nothing wrong with pre-marital sex. Fifty-five percent of those from the middle class were against it (Phillips, 1976). There was also a difference in the attitudes according to the gender of the individual. Young males tended towards being more permissive in their attitudes towards sex while young females appeared to be more conservative in their views. Attitudes and notions regarding premarital sexual activities held by young males included (1) to satisfy an urge, (2) to get experience, (3) to prove yourself and, (4) to have something over a girl (Phillips, 1976).

The majority of these attitudes and beliefs have remained fairly consistent over the decades. In an overview of sexual values and attitudes of young Jamaicans, Chevannes (1992) found many of these notions to be consistent with the earlier findings. He also found that in the case of young females, the most common reasons given for pre-marital sex included (1) no man will marry you before having sex, (2) if you don't have sex you will get sick, (3) you must be aware of the sexual side of a man before you marry him and, (4) it is nature. All have been identified through studies done on young people and their sexual behavior (Chevannes, 1992). The 1993 Contraceptive Prevalence Survey revealed that more than 60% of respondents between 15-24 years were sexually experienced (Morris et al., 1995).

#### Patterns of Sexual Behavior

Sexual behavior, which is usually established during adolescence, has become identified as a contributor to young adult AIDS morbidity and mortality. This behavior includes a spectrum of sexual activities related to HIV transmission including unprotected

vaginal, oral and anal sex. The main behavior associated with HIV infection in this population is unprotected penetrative sexual intercourse, that is, vaginal, anal and oral sex without a condom. This often results in sexually transmitted diseases , including HIV (Centers for Disease Control, 1992).

Studies show that in Jamaica, sexual intercourse begins at an early age and approximately 46.3% of adolescent males and 15.3% of adolescent females reported having sexual intercourse by the age of 14 (Figueroa, 1989). Many have admitted to having sex with more than one partner. A nationwide survey of knowledge, attitudes, and practices concerning AIDS and STDs was carried out in 1993. Of the 2,233 young subjects (15 to 24 years) surveyed, 84.4% males and 74.8% females reported having had sexual intercourse. This same study found that more than 23 percent of all the young adult males surveyed reported having sex with more than one partner within the one month period prior to the survey (Morris et al., 1995). The study further found that only 17.7 % of females and 19.7% of males were using condoms at every intercourse (Morris et al., 1995).

Lack of use of protective measures during sexual intercourse has resulted in a high rate of transmission of sexually transmitted diseases such a gonorrhea and syphilis. The reported rates were 474.8 cases per 100,000 for gonorrhea and 120.8 cases per 100,000 for syphilis in 1987 (Figueroa, 1989). The 1989 incidence rates have been estimated at three times that of 1987. The current statistics have not been specific to the young adult population. Individuals who begin sexual intercourse at an earlier age are more likely to have multiple partners in their adolescent and young adult years and are less likely to use

protective measures. Both behaviors increase their risk of acquiring an STD infection, including HIV (Centers for Disease Control, 1992).

### Knowledge, Attitudes, Beliefs and Practices (KABP) Studies

Knowledge and awareness of AIDS and its cause, the Human Deficiency Virus (HIV), appears to be universal for young people residing in both urban and rural regions in Jamaica. This notion is supported by the results of the 1993 Contraceptive Prevalence Survey conducted by the National Family Planning Board of Jamaica, and the Knowledge, Attitude, Behavior and Practices (KABP) Study conducted by the Epidemiology Unit of the Ministry of Health (McFarlane et al., 1994; Ministry of Health, 1996). These surveys also revealed an amalgam of beliefs regarding the transmission of HIV. The two main modes reported were transmission through sexual intercourse and transmission by blood transfusion. Other beliefs about HIV transmission modes included shaking hands and hugging, sexual intercourse between men, being bitten by mosquitoes, sharing needles used for drugs, sharing personal items such as clothes and utensils, and sexual intercourse between a man and a woman.

The surveys also reported that respondents at the youngest age (15-19 years) considered themselves at greater risk of contracting HIV and developing AIDS than those older than themselves (McFarlane et al., 1994; Ministry of Health, 1996). Despite the apparent success of this national survey in providing some understanding of the characterization of AIDS in the minds of the Jamaican public, it lacks information regarding the interactions among the traditional, indigenous, folk beliefs related to AIDS, the related sexual practices and the enabling forces associated with these beliefs and practices.

Qualitative studies conducted by researchers such as Brody (1981) and Sobo (1993) uncovered some of ethnomedical folk beliefs regarding AIDS, sexuality and the physiological functioning of the Jamaican body. Traditional cultural beliefs that are centered around the physiological functioning of the human body and are related health, sickness, disease and illness, constitute what is known as ethnophysiology (Helman, 1994). An ethnophysiological approach to the body involves all the ways in which an individual conceptualizes and experiences their body, including the mechanisms by which it fluctuates between and navigates states of health, disease, and illness. As a rule, traditional ethnophysiological beliefs are applied creatively to new problems in an effort to comprehend and manage these problems. Jamaicans employ these beliefs in their conceptualization and understanding of the AIDS disease.

For the average Jamaican layperson, AIDS may be classified in an undifferentiated way, with fairly fluid categories. In this respect, one might view AIDS as contagious, very contagious or not contagious at all. When AIDS becomes associated with "contagious," it may then be spread and acquired in many ways. Many Jamaicans believe AIDS was introduced to human circles by people who had sexual intercourse with animals. Animal material or "effluvia" contains foreign materials toxic to humans. Once in the body, it produces "waste" that is difficult to expel. This, like "sperm," causes a severe reaction and allows the individual to "come down" with disease (Sobo, 1993). Some Jamaicans believe AIDS is spread by contact with decaying matter excreted in sores on the skin of those who are ill. The impurities found in these sores come as a result of being "worked out" of the blood through the skin (Sobo, 1993).

The ethnomedical principles underlying reproductive and sexual behavior seem to be distinctly different for females and males. Each have bodies that contain distinct set of tubes, bags and processes. Menstruation is an example of a process that highlights this concept. It is considered a natural and necessary event in a female's life and should be allowed to happen naturally. Its purpose is to rid the body of bad blood, waste matter and toxins which have accumulated during the month and results in build up known as "pressure." Another common concept associated with menstruation is that its purpose is "to see your health" (MacCormack & Draper, 1987).

Menstrual blood represents a pure and clean entity. The waste matter and "semen" carried out in the blood flow are considered unclean. The dark clots or "clotty-clotty" seen in menstrual blood represent actual impurities and waste materials. If allowed to remain, these materials would cause blockage of the tubes (Sobo, 1993). Some Jamaicans, particularly rural ones, believe that sexual intercourse initiates menstruation by "opening" up the womb of the young adolescent female and exposing her to the dangers of male semen or "discharge." This notion may serve as one reason for deterring adolescent females from initiating early sexual activity. On the other hand, others believe menstruation can only occur before a young girl becomes sexually active. Many females practice menstrual regulation when their menses do not appear. This involves using purgatives and teas to "wash out" or draw down the blood (Brody, 1981; Sobo, 1993). Some Jamaicans believe that having sexual relations is good as it promotes regular menstruation and prevents menstrual cramps. Having cramps indicates a need for more sex (MacCormack & Draper, 1987).

Sex is associated with health in Jamaican culture. Sexual intercourse is a means of avoiding the dangers of blocking natural vitality and a way of promoting health. When males ejaculate during sex, "germ" (or sperm) and other impurities that have gathered in the body move up and out of the "seed bag" (or scrotum). "Sinews" are substances stored above and behind the seed bag in the "line" (or tube). These substances assist in the easy passage of germ. Sperm, sinews and waste all combine to form "discharge." This is expelled from the body during sexual excitement (Sobo, 1993).

"Discharge" can accumulate and cause deleterious effects if not expelled from a male's body. In some instances, this condition may be corrected through night emissions or "wet dreams." Men need to periodically clear the "line" by "discharging" so as to equalize and cleanse their bodies and to promote good health (Sobo, 1993). This notion would seem to support the encouragement of frequent and unprotected male sexual expression. Despite the deleterious nature ascribed to sperm, some Jamaicans view it as beneficial to women. Sperm can make women "fat" rendering them more appealing and attractive to their male suitors. Girls who are plump in their adolescence are thought to be sexually active and healthy. Many believe females may suffer from blocked sinews if they remain celibate for too long a period of time. This concept would seem to facilitate the encouragement of females to engage in early and frequent sexual activity. Some even maintain the belief that "sinews" balance may become altered enough to cause damage to nerves in females (Sobo, 1993).

Excess loss of "sinews" can cause a condition known as "dry spine," a condition that results in back pains. Men are said to "draw down" (become thinner in body) as these vital 'juices' are depleted. This condition can be reversed with time, but men must totally

abstain from sex in order to allow the body to replace its supply of “sinews.” Other therapeutic actions include squatting like women when urinating and drinking lime juice in order to help maintain celibacy during “sinews” replacement. Lime juice is also responsible for “drawing out heat” and dissipating sexual libido (otherwise known as “nature”) (Sobo, 1993). “Nature” is a natural state of being and a sure sign of health and sexual vitality. In order to maintain health, one must dispel rather than repress their nature (Sobo, 1993). Many of the above mentioned beliefs are used as justification for the necessity for frequent natural sexual intercourse and to persuade others to participate in various sexual activities that are not hindered by the use of prophylactics (e.g. condoms).

### HIV/AIDS Intervention Initiatives

#### Surveillance and Testing

Efforts to combat AIDS and HIV transmission in Jamaica have included a focus on surveillance and testing (Planning Institute, 1992). A national surveillance system for HIV infection was organized through the Epidemiology Unit of the Ministry of Health in Jamaica. This unit confidentially handles incoming reports and results for all individuals testing HIV-positive via screening programs. Doctors are required to report all cases of HIV infection and AIDS. A 1993 survey of Jamaican doctors and their reporting habits indicated that underreporting of AIDS did not seem to be a problem among this group (Figueroa & Braithwaite, 1995). HIV testing was first implemented in mid-1985 by the Ministry of Labor. This was in particular response to the need for testing all individuals applying for seasonal farmwork in the US. The National Blood Transfusion Service began screening all units of donated blood using the Enzyme Linked Immunosorbant Assay



(ELISA). By December of 1987, the US government required that all applicants for permanent visas to the US, aged 15 and over, be tested for HIV (Figueroa et al., 1995).

### Prevention and Control

A national AIDS committee was formed in 1988 in order to provide the Jamaican Ministry of Health with guidelines relating to prevention and control of HIV and AIDS. A national program for the prevention and control of HIV and AIDS and other sexually transmitted diseases was later implemented under the auspices of the Epidemiology Unit of the Ministry of Health of Jamaica (Planning Institute of Jamaica, 1992). Under this program, the HELPLINE was established in 1990, to provide counseling services to telephone callers with questions and concerns about AIDS. Other AIDS/HIV education efforts enlisted community involvement through community drama workshops that produced plays targeting individuals living in different parishes on the island (Planning Institute, 1992).

In December of 1990, Jamaica hosted a Regional Meeting on Behavioral Interventions of STDs and HIV/AIDS, sponsored by the Pan America/World Health Organization (PAHO) and cosponsored by the Ministry of Health of Jamaica and the Federal Centre for AIDS of the Ministry of Health and Welfare, of Canada (Pan American Health Organization, 1991). One of the main objectives of the meeting was to develop guidelines and regional strategies for behavioral interventions. The main concern was that efforts to control STDs such as AIDS, were centered around the clinical diagnosis, treatment and contact tracing of the STDs while primary prevention, including educational and behavioral interventions, remained unaddressed. One of the main target audiences cited were young people and children whose AIDS and HIV educational needs had not

been assessed (Pan American Health Organization, 1991). Suggestions of intervention strategies directed at these groups included the encouragement of beneficial behavior changes such as condom use and decreasing the number of sex partners. Other areas addressed were strategies to delay the onset of early sexual activity among young people.

The net result of this meeting was the *Kingston Declaration on Behavioral Interventions for the Prevention of STDs and HIV/AIDS* which stated that “interventions for the prevention of HIV infection should be combined or coordinated with resources used for preventing other STDs” (Pan American Health Organization, 1991). It was the hope that this method would then work to promote the concept of healthy sexuality. The efforts of the local government, non-governmental organizations, community groups and religious groups working towards behavioral interventions for young people, could benefit from exploring, and understanding the acquisition and cultural transmittance of basic health knowledge and health beliefs as they relate to behaviors conducive to HIV spread among the Jamaican young adult population.

#### Utility of the PEN-3 Model

Culture is defined as the knowledge people acquire and share, use to interpret actions, perceive objects, experiences and events, generate beliefs, values and perceptions and perform particular behaviors (Spradley & McCurdy, 1989). According to Airhihenbuwa (1993), it is simply a form of social interaction that is accepted by a particular community at a particular point in time. Through culture, individuals learn how to perceive, interpret and deal with entities facilitate adaptation to the surrounding environment. It is important therefore, to examine the cultural environment from which

Jamaican young adults develop in order to understand how this and other agents influence the way these individuals think and behave.

In utilizing the PEN-3 model as the theoretical framework for this study, the central focus is placed on identifying and understanding beliefs and behaviors that are under the influence of the culture and structure of the rural community environment. The PEN-3 model, is not a theory per se, as it does not attempt to show causality among factors thought to be associated with a particular outcome. It instead provides a structure for applying a “culture-centered” approach to produce a more holistic understanding of delimiting factors that may or may not need to be targeted for intervention. For it to be successful at identifying and classifying contextual factors of and understanding meanings behind AIDS-related knowledge, beliefs and sexual practices among young adults in a rural Jamaican setting, it is critical that the elements or precursors of these entities -- perceptions, enablers, and nurturers-- be explored.

Perceptions, according to Rosenstock (1974), serve as predictors of whether or not a person will perform a particular health action. Green and Kreuter (1991) in their analysis of the PRECEDE model identified *predisposing* (perceptions), *enabling* (enablers) and *reinforcing factors* (nurturers) as categories of delimiting factors that must be aligned in order for a behavior to occur and persist. Once identified, contextual factors must be further classified into meaningful categories--positive, existential, and negative-- to get a sense of how contextual factors influence knowledge, beliefs and practices. Airhihenbuwa (1995) sees this dimension of the PEN-3 model as critical, as it represents the process of discerning what is culturally appropriate and culturally relevant when

contextual factors manifest themselves in the form of beliefs and actions of individuals, families and communities.

Empirically, the PEN-3 has not been tested, but conceptually it has been applied to child health issues in developing countries. The PEN-3 model was operationalized at the African Regional Child Survival Workshop in Nigeria in 1990. Health workers attending this workshop utilized the PEN-3 model to identify positive, existential and negative beliefs related to four child health interventions: oral rehydration therapy (ORT), immunization, nutrition and high risk birth (Airhihenbuwa, 1993;1995). Based on their own experiences in the field, the health workers generated information on positive, existential and negative beliefs and used this to develop questions for community interviews with mothers, village health workers, traditional leaders and local government members. In addition, information was garnered on perceptions, enablers and nurturers, in order to assess the factors contributing to child health beliefs and practices that were to be the focus for health promotion within the community.

The exercise demonstrated the ubiquitous nature of health beliefs and practices relative to being positive, existential and negative. Beliefs were classified in more than one category depending on the aims and objective of the health intervention. Airhihenbuwa sites the example of how the belief “families should have a lot of children because of high child mortality rates” was classified as positive, existential and negative. The belief is considered a negative one, but health workers classified it as existential because it aligned itself with the realities of women living in the community. It could, however, be considered a positive belief in the case of a vaccination program designed to motivate individuals and families to have fewer children. In addition, the workshop was able to

identify those positive, existential and negative beliefs that were either traditional and rooted in culture or more recent and emergent from popular culture. Airhihenbuwa (1995) suggests that non-traditional and more recent beliefs and practices could easily be targeted for change by use of mass media methods such as posters, flyers, radio and television. Those beliefs and practices that were long-term should be reinforced or changed through health education in places such as the home or through ono-ono-contacts in the community.

The PEN-3 is particularly relevant to Jamaica, a developing country of the African diaspora, as it offers a space for placing the production and acquisition of health related knowledge within the cultural and structural context to which these experiences belong. Use of this culture-centered conceptual framework for the assessment of AIDS-related beliefs and sexual practices among Jamaican young adults, allows for an exploration of issues which are intimately associated with perceptions, and enablers and nurturers. On the basis of the information generated, knowledge, beliefs, practices and associated contextual factors can be categorized as positive, existential or negative.

### Summary

The problem of AIDS and HIV infection in young adults is of concern to Jamaica. The high incidence of AIDS cases in the young adult population and the accepted 8 to 10 year incubation period of HIV have provided some evidence linking infection acquisition to the earlier stage of development in this population. The sexual beliefs and attitudes of Jamaican young people, coupled with unsafe sex practices predispose Jamaican youth to HIV infection and AIDS. Examining young Jamaicans' belief systems is another way to

assess cultural knowledge regarding HIV and AIDS. Utility of a culture-centered conceptual framework, such as the PEN-3 model can help guide the development and use of culturally appropriate methodologies which can assist in identifying knowledge gaps and alternate conceptions, categorizing associated contextual factors and organizing them according to their relationships with the beliefs and practices of young adults. The pieces of information gained will prove crucial to Jamaican health education professionals as they collaboratively work within local Jamaican communities to develop HIV/AIDS educational prevention programs and design behavior change strategies best tailored to the sociocultural and economic situation of young adults.

## CHAPTER 3 DESIGN AND METHODS

### Introduction

The purpose of this study was to describe the AIDS-related knowledge, beliefs and sexual practices among young adults in Eastern rural Jamaica, and to identify existing relationships between AIDS-related knowledge, beliefs and selected sexual practices. The study also explored, through an assessment of AIDS-related community perceptions and selected enablers, the nature and context of knowledge, beliefs, practices and their relationships. This chapter describes the setting, design, subjects, procedures, data collection and analyses methods used for the study.

### Setting

The parish of St. Thomas is located on the southeastern coast of Jamaica. The parish borders Kingston and St. Andrew on the west and Portland, on the east. The parish is about 287 square miles in size and has a population of about 84,000 individuals (Jamaica Information Service, 1991). The economy is largely agricultural, with banana, sugar and coffee as mainstays. Coconut farming is also a common practice. Other industries include dairy production and food processing. The capital of St. Thomas, Morant Bay, was once a major shipping port for agricultural products such as banana, coconuts and coffee. It is now the principal administrative and business center for the parish. It represents a central zone for contact with the parish infrastructure i.e. small

shops, grocery stores and supermarkets, a meat and vegetable market, two or three banks, a main post office, a library, a police station, the parish church, and a small assortment of lawyers' and doctors' offices. It also houses the main high school, Morant Bay High, for the parish. The historic courthouse, the site of the "1865 rebellion," is located at the center of the town and is directly preceded by the statue of National Hero, Paul Bogle, leader of the rebellion (Jamaica Information Service, 1991).

The main hospital for the parish is located just on the eastern outskirts of Morant Bay (in Lyssons), and shares the same compound as the parish Public Health department and the Morant Bay (Type III) Health Center. The Social Development Commission center, which oversees much of the youth development initiatives in St. Thomas, is situated in Springfield, the western fringe of Morant Bay. Much of the population (between 9500 and 10,000 individuals) associated with Morant Bay live in nearby "urban fences" or town border areas such as Duhaney Pen, Bamboo River, Springfield, Lyssons and Water Valley (The Daily Gleaner, August 2, 1989).

The incidence of HIV and AIDS have been steadily increasing in the parish. By the beginning of the third quarter of 1995, 22 new cases of AIDS were reported. This represented an increase of over 100% (9 cases in 1994 to 22 in 1995). By March of 1997, 57 AIDS cases had been reported in the parish (Ministry of Health, 1997). Current incidences of HIV are uncertain. New cases are generally tested at the Princess Margaret Hospital and Health Center STD clinic. AIDS cases are usually investigated and clients are brought in and counseled. Sexual contacts are elicited from each case and traced by the Parish Contact Investigator (a public health nurse). Prevention education is done at he



health center is done in the form of STD talks and condom demonstrations by the STD Clinic Educator, with special emphasis on clients with multiple sex partners.

### Research Design

This study was descriptive and exploratory in nature and utilized the integrated methodological approach. This approach has been used in health education research related to young people and HIV/AIDS to facilitate a more powerful means of data collection, data analysis and interpretation (Dockrell & Joffe, 1992). The study employed a two-phase design which utilized sequential triangulation of quantitative and qualitative research methods (Creswell, 1994). The first phase produced quantitative results via a survey. The second phase utilized ethnographic field methods to create a context for the quantitative results. Data collection, analysis and interpretation was based on the PEN-3 conceptual framework, a culture-centered model for description, assessment and cultural understanding of health-related beliefs and behavior. Data collection occurred between May, 1997, and August, 1997.

### Survey

Survey research is especially appropriate for description of characteristics of large populations (Babbie, 1992). It provides way to measure attitudes and orientations in these populations. Using the PEN-3 model as a framework for description, a pilot survey was used to identify the AIDS-related knowledge, beliefs, sexual practices of young adults in Eastern rural Jamaica. The survey was guided by the following questions:

1. What are the AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica?

2. Is there a relationship between AIDS-related knowledge, beliefs and selected sexual practices?

Questions for the survey were drawn from portions of the 1990-1994: Sexual Decision Making Among Jamaicans Survey, which included both open and closed ended items (LeFranc et al., 1994). The measures in this large cross-sectional survey related to sexual socialization, attitudes and practices; birth control knowledge and contraception; AIDS and STD knowledge and beliefs; family values and expectations; union history; general health history, beliefs and practices (LeFranc et al., 1994). Reliability was established via a sample of 33 questions from the questionnaire. A 90% agreement on 28 of 33 questions was reported. (LeFranc et al., 1994). This instrument for this study consisted of 50 questions which were organized in the form of a single questionnaire (see Appendix A).

The variables were selected for this study after review of previously published studies which focused on the sexual behavior of Jamaicans and issues associated with HIV and AIDS (Chevannes, 1992; 1993; Chevannes & Chambers, 1991; LeFranc et al., 1994; MacFarlane et al., 1994; National Family Planning Board, 1988). The selected variables were knowledge about HIV transmission, knowledge about AIDS disease, knowledge about self-protective actions, beliefs about the importance of AIDS, and belief about personal vulnerability to HIV/AIDS; participation in vaginal, oral and anal sex, participation in vaginal, oral and anal sex without condoms over the past year; participation in vaginal, oral and anal sex without condoms over the past month.

"Knowledge about HIV Transmission" was determined through a 10-item yes/no scale. Correct answers received a value of "1." Other answers were assigned a value of

“0.” The level of response was assessed by looking at the score earned by each respondent.

“Knowledge about AIDS disease” was determined by an 8-item true/false/could be true/don’t know scale. A value of 1 was assigned for each correct answer, and a value of 0 for any other answer given. Knowledge was assessed by looking at the score earned by each respondent.

“Knowledge about HIV/AIDS self-protective actions” was assessed through a 10-item very well/fairly well/not at all/don’t know scale. A value of 1 was assigned for each correct answer, a value of 0 for any other answer given. Frequencies and percentages were also used to assess responses given.

“Beliefs about the importance of AIDS” were assessed through a 10-item “more important /equally important/less important” scale. The scale was treated as a global measure of relative importance. Based on the three-point Likert scale, the maximum score for the global scale was 30. Lower scores represented a lower degree of importance, and higher scores represented a higher degree of importance.

“Belief about personal vulnerability to HIV/AIDS” was measured through use of a 5-point likert scale. The corresponding titles included 5 (no chance at all), 4 (not much chance), 3 (some chance ), 2 (a strong chance), and 1 (a very strong chance). Personal vulnerability was collapsed into 2 levels: high vulnerability (“very strong chance” and “strong chance”) and low/no vulnerability (“some chance,” “not much chance” and “no chance at all”).

“Sexual Practices” were measured by asking young adults to indicate whether they had ever engaged in (1) vaginal, oral and anal sex, (2) sex without a condom over the past

year and, (3) sex without a condom over the past month. Sexual practice was then defined in terms of safe (never having sex without a condom) vs unsafe sex (hardly ever, sometimes, most of the time, or always having sex without a condom).

### Subjects

Subjects for the study were drawn from a pool of 107 young adults who were participants in the National Youth Service program. This program is sponsored by the Ministry of Education, Youth and Culture, and administered through the Social Development Commission in the Eastern rural parish of St. Thomas, Jamaica. Subjects were between the ages 18 and 24 years and resided in St. Thomas. Participants were approached and invited to volunteer for this study.

### Data Collection Procedures

This study procedures were approved by the University of Florida Institutional Review Board. Permission to invite the young adults to participate was requested from the All-island manager and the Eastern regional coordinator of the National Youth Service (NYS) Program developed by Jamaica's Ministry of Education, Youth and Culture. During scheduled Youth Service workshops and orientation sessions, young adults between the ages of 18 and 24 years of age were invited to participate in the study. The purposes and procedures of the research were orally explained. Students who wished to participate, wrote their names, availability and where they could be located on a sheet of paper which was circulated during the information session.

A pilot face-to-face administration of the questionnaire was conducted. This format has been successfully used to collect survey data on sexual behavior from

populations within Jamaica (LeFranc et al., 1994; MacFarlane et al., 1994; National Family Planning Board, 1988). As Bernard (1995) points out, this format allows the researcher to (1) use the survey with low literate individuals, (2) clarify those questions that were not understood by the respondent, (3) employ additional data collection techniques e.g. cue cards when asking sensitive questions, and (4) verify that it was the respondent who answered the question and not someone else.

Three subjects participated in a procedural trial at one of the NYS workshops held in St. Thomas. No problems were discovered with the oral or written directions. Minor problems were discovered in the wording of 2 questions ( Questions # 3 and # 21.4) on the survey. Adjustments were made accordingly, with substitution of the word “born” with the word “raised” in #3, and clarification of the word “heterosexual” in # 21.4. Survey administration occurred in an average time of 21 minutes. All participants gave verbal consent to be contacted for the qualitative phase of the study.

Data collection occurred at sites where NYS workshop and orientation sessions were held. Data were also collected at various NYS placement sites to accommodate those participants who were not able to attend workshops. At the beginning of each survey, the participant was briefly informed about the background of the study. A brief statement from the questionnaire was read to the participant informing them of the study objectives and the types of questions to be asked. Participants were told that participation was voluntary and refusal to participate would not affect their position with the NYS program. They could withdraw at any time during the process and should verbally indicate this desire to the researcher. Participants were also given the name and address of

a local contact who could attend to any further concerns or questions regarding the study. They were asked to give their oral consent to proceed with the survey.

The researcher read the introduction to each section of the questionnaire before proceeding to the questions in that section. Given the sensitive nature of some of the questions being asked, steps were taken to reduce intrusiveness and the process. Questions that involved multiple, close ended responses were reproduced on 5 x 7 note cards and offered to the respondents. This allowed participants to follow in the reading of the response categories, and to give the number of the response to those questions considered highly sensitive. Participants were asked at the end to orally indicate their desire to participate in further lengthy discussion regarding issues presented in the survey. Those who agreed were asked to record their names, location and times they would be available to do this. The young adults' privacy and confidentiality were maintained by (a) placing a 3-digit identification number on each survey; (b) administering the survey in a designated area that was out of earshot of other individuals; (c) securing completed questionnaires in a file cabinet at the researcher's home.

### Data Analysis

Statistical analyses of the survey data was accomplished using SPSS software (SPSS 7.5 for Windows, 1997). As suggested by Aday (1996), Fink (1995) and Norusis (1997) survey data were exploited by using appropriate methods of analysis. Descriptive statistics were reported for demographic characteristics and the knowledge, beliefs and practices garnered. Inferential statistics were used to examine relationships between variables. Specifically, Chi-square analyses were done where appropriate to determine the

relationships the following categorical variables: beliefs about the importance of AIDS, beliefs about personal vulnerability with the practice of safe/unsafe sex. Both were assessed for safe/unsafe sex over the past year and over the past month. The level of significance for each chi-square was 0.05. Fisher's exact chi-square tests were computed for each because the expected value in some of the cells was less than 5 (Fink, 1995). To examine any differences in knowledge levels between young adults who practice safe sex and those that do not, t-tests were done for safe sex variables over the past year and the past month respectively. Pearson's Correlations were done to examine associations between knowledge and beliefs.

For a group of 58 respondents, power analysis is adequate to detect a medium population effect size at power 0.80 for  $\alpha = 0.05$ . The effective sample sizes are noted where data values are missing.

#### Rapid Ethnographic Assessment

Rapid ethnographic assessments assist in providing locally relevant cultural information to be used to improve health programs over a relatively short period of time (Pelto & Pelto, 1996). The purpose of the ethnographic assessment in this study was to clarify or enrich the findings of the quantitative portion of this study. Using the PEN-3 model as a guide, the nature and context of AIDS-related variables were explored by arranging domains and themes related to the variables into conceptual categories. This helped to elucidate the cultural appropriateness of beliefs and behaviors. The ethnographic assessment was guided by the following question:

1. What does a rapid ethnographic assessment of AIDS-related community perceptions and selected community enablers reveal about the nature and context of AIDS-related knowledge, beliefs, sexual practices and their relationships?

#### Data Collection Procedures

HIV/AIDS Rapid Anthropological Assessment Procedures (AIDS RAP) guidelines were used to conduct the ethnography (Scrimshaw, Carballo, Ramos & Blair, 1991; Scrimshaw, Carballo, Carael, Ramos & Parker, 1991). These procedures are particularly useful to researchers who focus on issues in cultures with which they are already familiar and facilitate development of basic ethnographic assessment in a relatively short period of time. Key informant interviews and participant observation were selected as the HIV/AIDS RAP techniques for the ethnographic phase of this study.

#### Key Informant Interviews

The key informant interviews involved friendly conversation into which the ethnographer (person conducting the interview) was free to introduce elements that assisted the key informant (insider to the situation) in responding as an insider ought to (Spradley, 1979). The elements involved included explicit purpose, which involved making clear to the informant, the purpose of the interview; ethnographic explanations, which required the ethnographer to repeatedly offer explanations to the informant and placed the informant in the role of “teacher”; and finally, the ethnographic question, which utilized different question formats to illicit the kind of information necessary to understand the essence of the cultural context being studied (Spradley, 1979). Question probes were



used throughout the interviews to explore the ethnographic variables and to elicit a more deeper explanation.

Key informants. The key informants in this study consisted of two sets of individuals: (1) young adults who completed the pilot survey and (2) community leaders who were either involved in STD/AIDS prevention or social development programs for young adults. Young adults who placed their names on the “post-survey” list were approached by the researcher and invited to participate. Selection of key informants from the community was based on recommendations by local health professionals and youth program coordinators. Those who were available and willing to discuss issues related to the research project were invited to participate in the interview.

Interviews. Interviews with key informants took place over several weeks in a variety of circumstances. Interviews were conducted at sites such as the Public Health Department, the local STD clinic, the Community Social Development Center, NYS training camp site, the local Police Department, NYS volunteer placement sites and key informant residences. The length of the interviews ranged from 15 minutes to 1 1/2 hours. Informants were read an informed consent form (See Appendix B) and asked to give verbal consent to proceed with the interview. The interviews were audio-recorded only after verbal permission was granted by the informant. Informants were advised of their right to refuse answer any question posed to them and could terminate the interview whenever they pleased, with no consequences to them.

Interviews with young adult key informants were conducted based on the guidelines set forth by Spradley (1979). Exploratory questions were utilized to elicit responses that explored and validated concepts presented by their peers in relation to

AIDS as disease, sex with and without condoms, condom availability and accessibility, and HIV/AIDS prevention. Interviews with community leaders were fairly informal.

Community leaders were asked open-ended questions related to HIV/AIDS and young adults, norms of sexual conduct with and without condoms, condom availability and accessibility, and HIV/AIDS prevention for young adults. Discussion was conducted based on flexible use of AIDS RAP interview guides (See Appendix C). The confidentiality of the informant was respected at all times and no information was divulged to other community members, neighbors or authorities. Informants were asked to refrain from using their own names and those of others in the community. Interviews were assigned a code number, for example, 1J or 013. Notes were taken throughout the duration of each interview.

#### Participant Observation

Participant observation acted as a strategy for both listening to people and watching them in natural settings. This helped to ensure that cultural knowledge, perceptions and behaviors were not distorted. The purpose of participant observation in this study was to watch and interact with the condom environment to gain a greater understanding of the local context of condom resources (availability and accessibility) and HIV/AIDS prevention (HIV/AIDS education for young adults).

Observation sites. Observation sites for this study were selected according to two criteria. First, the sites were associated with young adults. Secondly, the sites were diverse enough to provide information on a variety of AIDS-related issues. The primary locations selected included the health center, vendor stalls, shops, pharmacies,

supermarkets, taverns and bars located in Morant Bay and a HIV/AIDS education session held for members of the Morant Bay Police Youth Group.

Field notes. Field notes, which consisted of written accounts of events and conversations, were made during or shortly after participant observation. Observations were assessed in terms of semantic relationships such as (1) X is a type of condom, (2) X is a place for obtaining a condom, and (3) X is a way of obtaining a condom (Spradley, 1980).

### Data Analysis

All audio-recorded key informant interviews were transcribed and transcriptions were coded into categories related to the variables under ethnographic assessment. Categories coded for included perceptions about HIV/AIDS, reasons for sex with and without condoms, condom availability and accessibility and HIV/AIDS prevention. Field notes from participant observation were coded into categories related to condom availability and accessibility, and HIV/AIDS education. Domains and themes were derived via an ethnosemantic analysis, that is, the discovery of domains and cultural themes related to perceptions, enablers and nurturers. Coded categories were later organized into information domains and themes corresponding to PEN-3 categories of positive, existential, negative. Direct quotes from several of the interviews were also utilized to help provide a more interpretive analysis. This analysis was used to build a contextual picture of the AIDS-related variables as conceptualized by the informants (Spradley, 1979).

### Ethical Considerations

Key informant interviewing and participant observation invade the lives of informants and often require that sensitive information be revealed. The following were employed to ensure that the rights and privileges of the participants were protected throughout the study:

- a. Research objectives were articulated verbally and in writing so that they were clearly understood by the participant.
- b. Informed verbal consent to proceed with the study was obtained from all participants.
- c. Participants were informed of all the methods and instruments used in this study.
- d. The wishes of the participants were considered first when deciding to record information presented.
- e. The final decision regarding participant anonymity rested with the participant.

## CHAPTER 4 RESULTS AND DISCUSSION

### Introduction

The purpose of this chapter is to present the results of data analysis and a discussion of the results. The data presentation was organized around the specific research questions. Results of the survey will be presented first, followed by those of the ethnographic assessment.

### Survey Results

The primary purpose of the survey was to describe the AIDS-related knowledge, beliefs and sexual practices of the young adult population. The secondary purpose was to identify relationships between knowledge, beliefs and selected sexual practices described.

### Sample Characteristics

Fifty-eight (58) young adults participated in the survey portion of the research. Thirty-eight (65.5%) were females and 20 (34.5%) were males. All young adults were between 18 and 24 years of age. Eighteen (31%) of the young adults were 18 years old, and the mean age was 19.7 years. Tables 4-1 and 4-2 contain a breakdown of the general characteristics of the sample. Thirty-nine (67.3%) reported they lived with their immediate family, 11 (19%) lived with extended family and relatives, 4 (6.9%) lived with a boyfriend or girlfriend, and 4 (6.9%) lived with another person other than those

mentioned. The majority of the participants (77.6 %) had attained a secondary/high school level of education. Only 2 (3.4%) participants had attained a community college level of education. Ten (17.2%) participants described themselves as very religious, 12 (20.7 %) as moderately religious, 11 (19.0%) as slightly religious, and 1 (1.7%). Four (6.9%) indicated they were not sure. Only fourteen (24.1%) of the participants reported they had ever had a sexually transmitted disease.

Table 4-1. Age distribution of survey sample (N=58).

	Mean	Mode	S.D.	Range
Age in years	19.71	18	1.82	18 - 24

Table 4-2. Characteristics of survey participants (N=58)

Characteristics	FEMALE		MALE	
	no.	%	no.	%
<b>Education</b>				
secondary/high	28	48.3	17	29.3
vocational/trade	6	10.3	3	5.2
secretarial	2	3.4	0	0.0
university/college	2	3.4	0	0.0
<b>Living arrangements</b>				
family	23	39.7	16	27.6
extended family	8	13.8	3	5.2
boyfriend/girlfriend	4	6.9	0	0.0
other	3	5.2	1	1.7
<b>Religiosity</b>				
very religious	10	17.2	5	8.6
moderately religious	12	20.7	4	6.9
slightly religious	11	19.0	6	10.3
not religious at all	1	1.7	2	3.4
not sure	4	6.9	3	5.2
<b>STD experience</b>				
Yes	9	15.5	5	8.6
No	29	50.0	15	25.9

### Results of Individual Research Questions

Research Question #1. What are the AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica?

Results: AIDS-related knowledge and beliefs were assessed by examining (1) knowledge about HIV transmission, (2) knowledge about AIDS, (3) knowledge about self-protective actions, (4) beliefs about the importance of AIDS, and (5) beliefs about personal vulnerability to HIV/AIDS. Results are summarized in the following tables.

Table 4-3 presents the results of knowledge about HIV transmission. The range of correct responses for young adults for the 10 items was between 60-100%. Majority of the young adults recognized the documented modes of transmission, that is, sharing drug needles, receiving a blood transfusion, having sex with homosexual or a bisexual and sexual intercourse between men and women. Although 60.3% of the young adults responded correctly regarding HIV transmission via mosquito bites and sexual activity with animals, the remaining 39.7% expressed concern that HIV transmission could occur via these modes.

Table 4-4 presents the results of knowledge about AIDS disease. The range of correct responses for young adults for the 8 items was between 41-93%. The majority of young adults recognized that AIDS was a preventable disease and that it was false to assume that a person's sexual practice had little bearing on whether or not they got AIDS (72% and 81% respectively). Only 41% answered correctly regarding the notion of AIDS and homosexuality. The other 59% felt it was a homosexual disease. Only 62.1% of the young adults seemed aware that majority of cases of AIDS in Jamaica occurred among heterosexuals.

Table 4-3. Knowledge about HIV transmission (N=58) **Question 19:** Which of the following activities do you believe can cause a person to get the AIDS virus?

ITEM	No. answering correctly	Percent %
1. Shaking hands or hugging (N)	56	96.6
2. Sharing drug needles (Y)	56	100.0
3. Sharing a home or other living space (N)	56	96.6
4. Sharing a classroom, office or other work environment (N)	56	96.6
5. Receiving a blood transfusion (Y)	56	96.6
6. Having sex with a homosexual or bisexual man (Y)	53	91.4
7. Sexual intercourse between men and women (Y)	57	98.3
8. Being bitten by an insect (e.g. mosquito) that has bitten someone with the AIDS virus (N)	35	60.3
9. Sharing personal items like dishes, cups, forks (N)	53	91.4
10. Having sex with an animal (N)	35	60.3

Y = Yes; N = No

Table 4-4. Knowledge about AIDS disease (N=58) **Question 21:** What do you think about the following statements about AIDS disease?

Items	No. answering correctly	Percent (%)
1. You can always tell a person has AIDS disease by looking at them. (F)	32	55.2
2. AIDS is a preventable disease. (T)	42	72.4
3. AIDS is a homosexual disease. (F)	24	41.4
4. In Jamaica, most people with the AIDS disease are heterosexual. (T)	36	62.1
5. AIDS is a curable disease. (F)	50	86.2
6. Men can't get AIDS from women. (F)	54	93.1
7. A person's sexual practice has little to do with whether or not they get AIDS. (F)	47	81.0
8. Some people can be infected with the AIDS virus for years and still show no outward signs of AIDS disease. (T)	52	89.7

T= true; F= false



As previously mentioned, the word “heterosexual” proved to be unfamiliar to respondents. Although the term was clarified for respondents during the survey, residual confusion regarding “heterosexual” versus “homosexual” may have prompted young adults to respond in the negative. Finally, the majority of young adults responded correctly to statements regarding the curability of AIDS, female to male transmission and the lack of physical manifestation of disease despite infection.

Table 4-5 presents the results for knowledge about AIDS self-protective actions. All young adults (100%) agreed that condoms were protective against the AIDS virus. The majority of young adults identified avoiding sex with a known carrier of the virus, avoiding sex with a homosexual or bisexual, sticking to one partner, not having any sex at all and refusing a blood transfusion as key protective measures. Less than one-third of the sample, however, indicated avoiding kissing (20.7%) and not having sex with unclean looking people (32.8%) as unacceptable methods of self-protection. Only about a half (50% and 46.6%) recognized that avoidance of public toilets and mosquito bites were not accepted methods of self-protection.

Table 4-6 presents the results of beliefs about the importance of AIDS. The highest agreement in rating of AIDS importance by the young adults was in AIDS being more important than not having good health (81%). Close to equal numbers of respondents felt that AIDS was either more important than or less important than problems in a relationship (34.5% and 36.2% respectively). The percentages of young adults rating AIDS as more important than economic problems, poverty, being sick, trouble with children, mental problems and illiteracy were fairly similar. The percentages of those ranking AIDS more important than not having enough money and crime, were together similar, but were slightly below the ratings of importance given to the other issues in that same category.

Table 4-5. Beliefs about AIDS self-protective actions (N=58) **Question 22:** Please tell me how well you think each of the following actions can protect you from and reduce the risk that you can get the AIDS virus.

Item	no. responding correctly	Percent %
1. Avoid kissing people not know well	12	20.7
2. Refusing a blood transfusion	55	94.8
3. Avoid using public toilets	27	50.0
4. Avoid being bitten by mosquitos	27	46.6
5. Not having sex with unclean-looking people	19	32.8
6. Using a condom during sex	55	100.0
7. Not having any sex at all	49	84.5
8. Stick to one partner who is faithful to you alone	56	96.6
9. Avoid sex with a homosexual or bisexual	48	82.8
10. Avoid having sex with someone you know has the AIDS virus	57	98.3

Table 4-6. Beliefs about the importance of AIDS (N=58) **Question 23:** How much of a problem is AIDS compared to other problems? For each problem, please tell me whether it is more important than AIDS, less important than AIDS or equally as important as AIDS.

Item	LI		EI		MI	
	no.	%	no.	%	no.	%
1. Not having good health	2	3.4	9	15.5	47	81.0
2. Economic problems	15	25.9	16	27.6	27	46.6
3. Poverty	16	27.6	16	27.6	26	44.8
4. Not having enough money	18	31.0	17	29.3	23	39.7
5. Crime	16	27.6	19	32.8	23	39.7
6. Being sick	13	22.4	20	34.5	25	43.1
7. Trouble with children	18	31.0	10	17.2	30	51.7
8. Having mental problems	14	24.1	16	27.6	28	48.3
9. Problems in the relationship	21	36.2	17	29.3	20	34.5
10. Illiteracy	12	20.7	18	31.0	28	48.3

LI = Less important, EI = equally important, MI = More important

N.B. Percentage totals may not add up 100 due to rounding

Table 4-7 presents the results of young adults' ratings of their personal vulnerability to HIV/AIDS. Close to half (44.8%) of young adults rated themselves as having no chance at all for getting HIV/AIDS. The rest of the young adults (55.2 %) rated themselves as having "not much" to "a very strong chance" of getting HIV and AIDS.

Table 4-7. Beliefs about personal vulnerability to HIV/AIDS (N=58) **Question 25:** What would you say are the chances you could get HIV and AIDS?

Item	Frequency (N)	Percentage (%)
a very strong chance	2	3.4
A strong chance	5	8.6
Some chance	10	17.2
Not much chance	15	25.9
No chance at all	26	44.8

Tables 4-8 through 4-12 present the results of the sexual practices of the young adults in the survey. The predominant type of sexual practice by young adults (84.5%) was vaginal sex. Only 6.9% (4) young adults admitted to having practiced oral sex. All of the sample (N=58) indicated that they had never practiced anal sex.

Table 4-8. Types of sex (N=58) Have you ever had vaginal/oral/anal sex?

Item	Vaginal Sex		Oral Sex		Anal Sex	
	no.	%	no.	%	no.	%
YES	49	84.5	4	6.9	0	0.0
NO	9	15.5	54	93.1	58	100.0
TOTAL	58	100.0	58	100.0	58	100.0

Since the majority of sexually experienced young adults practiced vaginal sex, only those results pertaining to vaginal sex were reported. Tables 4-9 and 4-10 present a summary of the vaginal sex practices over the past year. Approximately 90% (44) of those indicating they were sexually experienced, practiced vaginal sex over the past year. Of these 44 young adults reporting having vaginal sex over the past year, 12 (27.3%) and 12 (27.3%) reported “never” and “hardly ever” having vaginal sex without using a condom. Eleven (25%), 6 (13.6%) and 3 (6.8%) young adults, respectively, reported having vaginal sex “sometimes,” “most of the time” and “always” having vaginal sex without using a condom.

Table 4-9. Vaginal sex over the past year **Question 39:** Did you have vaginal sex over the past year? (N = 49)

Item	Frequency (N)	Percent (%)
<b>YES</b>	44	89.8
<b>No</b>	5	10.2

Table 4-10. Vaginal sex over the past year without using a condom **Question 41:** Over the past year, how often did you have vaginal sex without using a condom? (N=44)

Item	Frequency	Percent (%)
<b>Never</b>	12	27.3
<b>Hardly ever</b>	12	27.3
<b>Sometimes</b>	11	25.0
<b>Most of the time</b>	6	13.6
<b>Always</b>	3	6.8

Note: Percentages may not add up to 100 due to rounding.

Tables 4-11 and 4-12 represent a summary of young adults reported vaginal sexual practices over the past month. Thirty (61.2%) young adults indicated they had vaginal sex

over the past month. Of these 30 young adults, five (16.7 %) of the young adults reported “always” having vaginal sex without using a condom over the past month. Thirteen (43.3%) reported “never” having vaginal sex over the past month without using a condom. Finally, similar numbers of young adults ( 4 per category) reported having vaginal sex “hardly ever,” “sometimes” and “most of the time” without using a condom over the past month.

Table 4-11. Vaginal sex over the past month **Question 45:** Did you have vaginal sex over the past month? (N=49)

Item	Frequency (N)	Percent (%)
YES	30	61.2
No	19	38.8

Table 4-12. Vaginal sex over the past month without using a condom  
**Question 47:** Over the past month, how often did you have vaginal sex without using a condom? (N= 30)

Item	Frequency	Percent (%)
Never	13	43.3
Hardly ever	4	13.3
Sometimes	4	13.3
Most of the time	4	13.3
Always	5	16.7

Note: Percentages may not add up to 100 due to rounding.

Research Question #2. Is there a relationship between selected AIDS-related knowledge, beliefs and selected sexual practices of young adults in Eastern rural Jamaica?

Results: As previously mentioned, knowledge about HIV transmission , AIDS disease and self-protection were measured by yes/no, true/false, very well/fairly well/not at all scales, respectively. Respondents received 1 for each correct response and 0 for any

other response. Beliefs about importance of AIDS were measured on a three-point Likert scale, where the minimum score was 12 and the maximum score was 30. The mean, standard deviation, range and maximum possible scores for each of these variables are reported in Table 4-13.

Table 4-13. Scores for knowledge about HIV transmission , AIDS disease, self-protection and beliefs about AIDS importance

Scores	N	Mean Score	S.D.	Range	Possible Score
<b>HIV Transmission</b>	58	8.87	0.97	5 - 10	10
<b>AIDS Disease</b>	58	5.81	1.37	2 - 8	8
<b>Self-Protection</b>	58	7.03	1.28	4 - 9	9
<b>AIDS importance</b>	58	22.28	5.49	12- 30	30

The mean score for AIDS importance was used to make determinations of additional grouping since it is the best measure of central tendency in interval data where there is a full range of data with no outliers. AIDS importance scores were stratified into: High (with scores equal to or higher than the mean representing a higher importance placed on AIDS) and Low (with lower scores than the mean representing lower importance placed on AIDS). For those who were sexually active over the past year, 22 (50%) respondents were in the “High” group and 22 (50%) were in the “Low” group. For those who were sexually active over the past month, 20 (66.7%) were in the “High” group and 10 (33.3%) were in the “Low” group.

Data for personal vulnerability to AIDS were stratified into two groups of young adults. The first group, the HIGH vulnerability group, included those who indicated a “very strong chance” and a “strong chance” of getting HIV and AIDS. The second group,

the LOW/NO vulnerability group, included those who indicated “some chance,” “not much chance” and “no chance at all” of getting HIV and AIDS. Based on this grouping, 14 (31.8%) subjects were in the “High” group and 30 (68.2%) in the “Low/No group,” for young adults sexually active over the past year. Of those sexually active over the past month, 13 (43.3%) were in the “High” group and 17 (56.7%) were in the “Low/No” group.

Sexual practice was defined in terms of sex without using a condom. “Sexual practice” was measured by asking the question: Over the past year/month, how often did you have vaginal sex without using a condom? Young adult responses were stratified into two: “Safe Sex” if respondents answered “never” (N= 12, for past year and N= 13, for past month) and “Unsafe Sex” if respondents answered “hardly ever,” “sometimes,” “most of the time,” “always” (N= 32 for past year and N= 17 for past month).

To see if there was a difference in knowledge about HIV transmission, AIDS disease, and self-protection between those young adults who practiced safe sex and those who practiced unsafe sex, a t-test analysis was conducted for each, looking at sex practices over the past year and the past month. Results are presented in Tables 4-14 and 4-15.

Table 4-14. Knowledge scores by sexual practice over the past year (N=44)

Knowledge	Unsafe Sex			Safe Sex			Df	t
	N.	Mean	S.D.	N.	Mean	S.D.		
HIV transmission	32	8.8	1.051	12	9.0	0.853	42	*0.460
AIDS disease	32	5.8	1.319	12	6.3	1.357	42	*1.111
Self-protection	32	7.2	1.281	12	6.5	1.243	42	*1.598

Df= degrees of freedom

\*=Non-significant at 0.05

Table 4-15. Knowledge scores by sexual practice over the past month (N=30)

Knowledge	Unsafe Sex			Safe Sex			Df	t
	N.	Mean	S.D.	N.	Mean	S.D.		
HIV transmission	17	9.1	0.781	13	8.8	0.725	28	*1.2482
AIDS disease	17	6.1	1.144	13	5.7	1.377	28	*0.7962
Self-protection	17	7.1	1.478	13	6.7	1.437	28	*0.6812

Df = degrees of freedom

\* = Non-significant at 0.05

No significant differences in knowledge and sexual practices were found between these two groups. That is, no statistically significant relationship was found to exist between knowledge about HIV transmission, AIDS disease and Self-protection and unsafe sex versus safe sex practice over the past year and the past month.

Fisher's chi-square analyses were used to see if there was a significant relationship between beliefs about the importance of AIDS, personal vulnerability and sexual practice over the past year and the past month. This was computed on these variables since expected values in some cells were less than 5. Results are presented in Tables 4-16 through 4-19.

Table 4-16. Belief about AIDS importance by sexual practice over the past year

Importance	Unsafe Sex	Safe Sex
High	14	8
Low	18	4

Effective sample size = 44; df = 1; For Fisher's exact test,  $\chi^2 = 1.833$  p = 0.310 (non-significant at p = 0.05)

Table 4-17. Belief about AIDS importance by sexual practice over the past month

Importance	Unsafe Sex	Safe Sex
High	10	10
Low	7	3

Effective sample size = 30; df = 1; For Fisher's exact test,  $\chi^2 = 1.086$  p = 0.440 (non-significant at p = 0.05)



Table 4-18. Belief about personal vulnerability by sexual practice over the past year

Personal vulnerability	Unsafe Sex	Safe Sex
High	11	3
Low/No	21	9

Effective sample size = 44; df = 1; For Fisher's exact test,  $\chi^2 = 0.354$   $p = 0.722$  (non-significant at  $p = 0.05$ )

Table 4-19. Belief about personal vulnerability by sexual practice over the past month

Personal vulnerability	Unsafe Sex	Safe Sex
High	9	4
Low/No	8	9

Effective sample size = 30; df = 1; For Fisher's exact test,  $\chi^2 = 1.475$   $p = 0.283$  (non-significant at  $p = 0.05$ )

Fisher's exact chi-square analysis did not demonstrate any significant differences in beliefs about AIDS importance and personal vulnerability between young adults who practiced unsafe sex versus safe sex, over the past year and over the past month.

To further clarify and highlight responses obtained related to the variables under study, a number of other relationships were examined. To see if there was a difference in knowledge about HIV transmission, AIDS disease and self-protection between young adult females and males, t-test analyses were conducted. No significant differences in knowledge were found between females and males. The results are summarized in Table 4-20.

Table 4-20. Knowledge scores by gender (N=58)

Knowledge	Female (N=38)		Male (N=20)		t
	Mean	S.D.	Mean	S.D.	
HIV transmission	9.03	0.8216	8.60	1.1877	*1.6050
AIDS disease	5.92	1.3024	5.60	1.5001	*0.8465
Self-protection	6.92	1.1942	7.25	1.4464	*0.9264

Df= 56; \* = non-significant at 0.05

Fisher's chi-square analyses were used to see if there was a significant relationship between belief about the importance of AIDS and gender as well as personal vulnerability and gender. Fisher's exact test did not demonstrate a statistically significant difference at the 0.05 level for beliefs between females and males. See Table 4-21 and Table 4-22.

Table 4-21. Belief about the importance of AIDS by gender (N=58)

Importance of AIDS	Female	Male
High	23	8
Low	15	12

df = 1; For Fisher's exact test,  $\chi^2 = 2.219$  p = 0.172 (non-significant at 0.05)

Table 4-22. Belief about personal vulnerability by gender (N=58)

Personal vulnerability	Female	Male
High	9	8
Low/No	29	12

df = 1; For Fisher's exact test,  $\chi^2 = 1.684$  p = 0.233 (non-significant at 0.05)

Fisher's chi-square analyses was used to see if there was a significant relationship between STD experience and unsafe versus safe sex), for the past year and the past month respectively. Fisher's exact test did not demonstrate a statistically significant difference at the 0.05 level for STD experience between those who practice unsafe sex versus safe sex.

That is, prior STD experience was not related to safe sex practice. See Table 4-23 and Table 4-24.

Table 4-23. STD experience by sexual practice over the past year

STD Experience	Unsafe Sex	Safe Sex
Yes	11	2
No	21	10

Effective sample size= 44; df = 1; For Fisher's exact test,  $\chi^2 = 1.315$   $p = 0.459$  (non-significant at  $p = 0.05$ )

Table 4-24. STD experience by sexual practice over the past month

STD Experience	Unsafe Sex	Safe Sex
Yes	7	3
No	10	10

Effective sample size = 30; df = 1; For Fisher's exact test,  $\chi^2 = 1.086$   $p = 0.440$  (non-significant at  $p = 0.05$ )

Finally, Pearson's product-moment correlations were done to test the associations between knowledge about HIV transmission, AIDS disease, self-protective actions and belief about the importance of AIDS. See Table 4-25.

Table 4-25. Pearson's correlation matrix for knowledge scores of transmission, AIDS self-protection and belief scores about importance (N=58)

	TRANSMIT	DISEASE	PROTECT	IMPORT
TRANSMIT	1.000	*0.298	0.214	0.006
DISEASE	*0.298	1.000	0.054	-0.187
PROTECT	0.214	0.054	1.000	-0.208
IMPORT	0.006	-0.187	-0.208	1.000

df=56,  $r = 0.250$ ; significant at  $p=0.05$

There was negligible association or relationship between transmission knowledge and self-protective knowledge, transmission knowledge and AIDS importance belief, self-protective knowledge and AIDS importance belief, AIDS disease knowledge and AIDS importance belief. There was a weak, positive association/relationship between knowledge of HIV transmission and knowledge about AIDS disease ( $r=0.298$  at  $0.05$ ). That is, higher HIV transmission knowledge scores tended to be linked with higher AIDS disease knowledge scores.

### Discussion

This portion of the study utilized a pilot survey to assess AIDS-related knowledge, beliefs and sexual practices among 58 young adults between 18 and 24 years old. Several of the findings from this survey were consistent with those reported from national *Knowledge, Attitudes, Beliefs and Practices (KABP)* and *Young Adult Reproductive Health* surveys conducted in Jamaica (Ministry of Health, 1996; National Family Planning Board, 1988). The findings will be briefly summarized in this section.

As noted in previous studies, knowledge about HIV transmission, AIDS disease and self-protective actions was high. Knowledge, however, was not found to be related to the practice of safe sex over a year or month long period. Despite high HIV knowledge levels about modes of transmission and AIDS disease, a number of misconceptions still exist. Belief about the importance of AIDS, as measured by a 3-point Likert global scale, was also not related to sexual practice over a year and month long period. A higher importance on AIDS was not associated with the tendency to practice unsafe or safe sex. Personal vulnerability to HIV was not related to the practice of unsafe or safe sex. Individuals who were categorized as having higher vulnerability to HIV/AIDS were not

more likely to practice safe sex than their low/no vulnerability counterparts. Lastly, there was no relationship between knowledge levels and gender, beliefs and gender, and prior STD experience and the practice of unsafe or safe sex.

#### Knowledge of HIV Transmission, AIDS Disease and Self-protective Actions

As is consistent with previously reported findings (LeFranc et al., 1994; Ministry of Health, 1996; Morris et al., 1995) overall levels of knowledge concerning the biomedical modes of HIV transmission and methods of self-protective actions were high. Notwithstanding this high level, certain misconceptions persist among a minority of young adults. These include the ideas that HIV could be transmitted via mosquito bites (39.4%) and sex with animals (39%). Also, a minority of young adults believed avoidance of mosquito bites to be a viable method of protection. This misconception has consistently been reported in national studies in Jamaica (LeFranc et al., 1994; Ministry of Health, 1996). In the 1996 KAP study, 26% of men and 31% of women cited mosquitoes as a means of transmission. The misconceptions may be due partly to an association with infectious disease transmission via animal vectors in Jamaica. This association is understandable as endemic illnesses to Jamaica e.g. dengue, are carried by mosquito vectors.

Knowledge about AIDS as disease is also universal, as is consistent with the findings of other studies (LeFranc et al., 1994; Morris et al., 1995; Ministry of Health, 1996). It is widely known that the disease is preventable and continues to exist without a cure. Just under half (45%) of young adults felt that one could tell a person had the disease by looking at a person. This is closely aligned with the importance placed by

Jamaicans on the visual appearances of persons deemed afflicted with illness and disease (Sobo, 1993).

There was still the persistence of the misconception that the disease is primarily a homosexual one (59%). This is not surprising as there still exists a strong antipathy to homosexuality by Jamaicans (Chevannes, 1992). In addition, there is the persistent fear that homosexual acts caused the development of AIDS. Sobo (1993) reorted that rural Jamaicans believed that AIDS is a product of "rotted semen" that has been deposited in the rectum during anal sex between homosexuals. Knowledge of 2 or more recommended preventive methods against HIV and AIDS was high. However, a large percentage of these young adults (65.5%)were still endorsing avoidance of kissing as a method of protection. A smaller percent (36.2%) endorsed avoiding use of public facilities as means of protection against AIDS. These are consistent with previous findings form larger national surveys (LeFranc et al. 1994; Ministry of Health, 1996). In these larger studies, approximately 28% of respondents were suspicious of public toilets as a source of HIV infection and believed that disease could be prevented by not using them. This belief was explained as being part of a general population association between disease and toilets. Finally, a correlational analysis revealed that knowledge about transmission was only weakly positively associated with knowledge about AIDS disease. That is, higher understanding about transmission mode implies more accurate knowledge about AIDS. This phenomenon was not statistically demonstrated in these larger studies (LeFranc et al. 1994; Ministry of Health, 1996).

### Beliefs about AIDS Importance and Personal Vulnerability

Not surprisingly, AIDS was ranked as more important than not having good health by the majority of respondents. This is consistent with findings from research on perception of health, illness and the Jamaican body (Sobo, 1994). Jamaicans are willing to tolerate physiological disturbances such as diarrhea which compromises the healthy functioning of the body. However, conceptions of AIDS as a deviant, debilitating and lethal disease, places it above general disruptions to physical health.

Equal numbers of respondents felt AIDS was either more important than or less important than trouble in relationships. Although the survey did not require respondents to disclose relationship status, it may be inferred that those who felt that AIDS was less important to them than problems in a relationship, were more likely to be in a relationship at the time of the survey or in instances before. Chevannes (1992) points out the important role of male-female relationships among young people in Jamaican society, particularly as they relate to sexual partnering and casual sex.

Close to half of the respondents rated themselves as having no vulnerability to AIDS. An additional 25% of them felt they had very little vulnerability to HIV and AIDS. Thus it would seem a larger percentage perceived themselves as not vulnerable to getting the AIDS virus. This trend was seen in the 1996 KABP study done by the Ministry of Health (Ministry of Health, 1996). The reasons given for this assessment by respondents in the study indicated that persons were more appropriately assessing their own risk and taking responsibility for their risk status in terms of their own behavior rather than deflecting it to that of their partner(s).

### Sexual Practice

The most common sexual practice reported by young adults in the survey was vaginal sex. The practice of oral and anal sex seemed virtually non-existent among the sample of 58 young adults (only 4 admitted to ever having participated in oral sex; all deny ever participating in anal sex). While anal or “battymen” sex is clearly tabooed in Jamaican society, a qualitative study done by Chevannes and Chambers (1991) revealed that oral sex may have been more widespread in the young adult population than is reported by young adults. Participants reported they found the concept of oral sex repulsive.

The reported frequency of sex without using condoms revealed that just over half young adults (54.6%) and close to a third of young adults (30%) never or hardly ever had sex without using a condom, over the past year and past month. This finding is inconsistent with those from the KABP study by the Ministry of Health (Ministry of Health, 1996). This study reported a higher rate of sexual activity with condoms. This was mainly due to an increase in the number of condom users in this age category over a 4-year period as a result of increased awareness about STDs and AIDS and ongoing condom campaigns.

### Knowledge, Beliefs, STD Experience and Unsafe/Safe Sex

No statistically significant differences in knowledge ( HIV transmission, AIDS disease, and beliefs about AIDS importance and personal vulnerability) between young adults who practiced unsafe sex and those who practiced safe sex. High levels of knowledge regarding HIV transmission, AIDS disease and self-protection were not related



to the tendency to practice safe sex. Likewise, higher rankings of AIDS importance and lower personal vulnerability were not associated with the tendency to practice safe sex. These results reiterate past findings regarding the link between knowledge, beliefs and behaviors. Knowledge and belief do not necessarily translate to correct or protective behavior (Ministry of Health, 1996). Misconceptions about HIV transmission and disease etiology, coupled with unrealistically low perception of risk, play a major role in young adults tendency participate in unsafe sex.

Finally, results indicate there was no difference in safe sex practices between those who had experienced and STD versus those who had not. A possible explanation is that common STDs such as gonorrhea and vaginitis, are fairly treatable. In addition, several are asymptomatic in males. Thus an STD may not been perceived as threatening enough to warrant consistent use of protective measures.

#### Knowledge, Beliefs and Gender

No significant differences were found in knowledge scores between males and females. In addition, there was no statistically significant difference in ranking of AIDS importance and personal vulnerability between males and females. These findings are slightly inconsistent with findings from previous KABP studies. Findings from the 1996 KABP study indicate that while AIDS importance and ranking of personal vulnerability are virtually the same for both genders, knowledge levels among males were slightly lower than for females (Ministry of Health, 1996).

### Summary

In summary , knowledge about HIV transmission, AIDS and self-protection was high among young adults. However, young adults had misconceptions related to transmission, disease and self-protection. AIDS was ranked overall as highly important compared to other life issues. A high proportion of young adults perceived themselves at low or no vulnerability to HIV and AIDS. Vaginal sex was the predominant type of sexually activity among young adults. Findings from the survey suggested that tendency to practice safe sex was unrelated to knowledge, beliefs, and prior STD experience. Fisher's chi-squared analyses and t-tests of these variables found no statistically significant differences to suggest a relationship between any of these variables, and between knowledge, beliefs and gender. Finally, only a weak, positive association existed between HIV transmission knowledge and AIDS disease knowledge.

### Rapid Ethnographic Assessment Results

This section presents the findings of the basic rapid ethnographic assessment. The primary purpose was to explore the contextual features of the AIDS-related issues presented by the young adults in the survey by assessing AIDS-related community perceptions and enablers. The secondary purpose was to build a conceptual picture of AIDS-related knowledge, beliefs and sexual practices based on the PEN-3 conceptual framework, a model that incorporates cultural into the assessment of knowledge, beliefs and practices.

### Key Informant Characteristics

Ten (10) young adults from the survey participated in the ethnographic portion of the study. Six (60%) were females and 4 (40%) were males. All young adults were between 18 and 24 years of age. Seven community leaders participated in the study. These consisted of: the STD clinic worker, the assistant public health educator for the parish, an STD/AIDS peer educator, a community social worker/police officer/youth group coordinator, the regional coordinator for the National Youth Service (NYS) program, the president of the Youth Leaders Association and a youth club leader/former coordinator of a community AIDS education initiative.

### Ethnosemantic Analysis: PEN-3 Domains and Themes

Ethnosemantic analysis involves discovering domains of meaning and themes from cultural information. These help in the discovery of ways in which people organize the elements of their local culture (Spradley, 1979). Domains represent types of classification or types of cultural categories. Cultural domains, as categories, consist of three elements: a cover term, included terms and semantic relationship. See Table 4-26 for an example.

Table 4-26. Examples of a Domain

COVER TERM	SEMANTIC RELATIONSHIP	INCLUDED TERMS
<b>A reason for condom nonuse</b>	X is a reason for Y	"It kills the vibes"
<b>A type of condom</b>	X is a type of Y	"Wet n Wild"

In this study, the cultural domains corresponded to the categories of interest during interviewing and participant observation: perceptions about AIDS, sexual activity

with and without condoms, condom resources (availability and accessibility), and HIV/AIDS prevention. The cultural themes emerging from explanations presented by informants were categorized according to the *positive*, *existential* and *negative* aspect of the PEN-3 model.

A list of cultural terms used by informants is first presented. Tables of common responses given by key informants as they applied to domains of perceptions about AIDS as disease, sexual activity and condom use, condom resources (availability and accessibility) and HIV/AIDS prevention are also presented. A short summary of the responses is presented after each table. Interviews with young adult key informants revolved around explanations of their and their peers's knowledge, beliefs and practices. Interviews with community leaders revolved around their perceptions of young adults' attitudes to the disease, its consequences, vulnerability, sex involving condoms and HIV/AIDS prevention in the community. Information garnered from participant observation about condom resources and HIV/AIDS education for youth groups was also included. Later, a thematic analysis of perceptions garnered in order to explore issues that explain or account for findings in the survey is presented. Emergent themes as they relate to HIV/AIDS are organized into categories that correspond to the cultural appropriateness dimension of the PEN-3 model, as a way of assessing the nature and context of knowledge, beliefs and sexual practices.

The guiding question for this portion was: What does a basic ethnographic assessment of community perceptions and selected enablers reveal about nature and context of AIDS related knowledge, beliefs, sexual practices and their relationships?

### Cultural Terms

The terms or phrases used by key informants when discussing AIDS-related issues represent symbols of meaning within a culture. The context in which they are used can lend insight into how concepts, thoughts, beliefs and attitudes are connected within the local society. To better understand the terms used by participants during key informant interviews, transcriptions were reviewed and terms or phrases were extracted for their usage as articulated by key informants. A list of these terms are presented with examples of their usage in Table 4-27. This was done mainly by asking: What do you mean by X?

Table 4-27. Local terms and their usage

Term/Phrase	Usage
<b>Bareback</b>	• They prefer sex "bareback."...without condoms.
<b>Battyman</b>	• "He is a batty man.....he's a faggot."
<b>Obeah</b>	• Somebody "obeah" them.....Yes, use witchcraft.
<b>Nature</b>	• "It kills the nature...he says it [the condom] doesn't feel like he is having real sex with it."
<b>Niceness</b>	• "Other girls say you don't get the niceness out of it [sex] when you have the condom on."
<b>Sketel</b>	• "Like a girl who have sex with everybody...she's a sketel or she is a whore"
<b>Vibes</b>	• It [condom] kills the vibes during sex."

The issues presented by the young adult key informants were organized into general ethnographic domains related to perceptions about what they and their young adult peers believed about AIDS, its consequences, importance and vulnerability; reasons for sexual activity with and without condoms; condom availability and accessibility; and HIV prevention needs for young adults.

According to young adult key informants, AIDS is perceived as being a homosexual disease that is incurable and lethal. It originally came from the USA and entered Jamaica through the tourist trade or via Jamaicans returning from abroad. There are physical (sores, pain, weight and appetite loss, difficulty in thinking, pain, physical deterioration) and social (losing friends, being made fun of, accusations of being homosexual) consequences to having this disease. See Table 4-28.

Table 4-28. Young adult perceptions about AIDS as disease

Domain	Common Responses during Interviews with Young Adults
<b>Characteristics of AIDS as disease</b>	<ul style="list-style-type: none"> <li>• It cannot be cured; it's a killer.</li> <li>• ....AIDS came by an animal.... a monkey.</li> <li>• ....it's the tourism that carried it here.</li> <li>• ....it came from America.</li> <li>• It is a homosexual disease.</li> <li>• It was contracted over there [USA] and taken to us by our own Jamaicans.</li> </ul>
<b>Consequences of AIDS disease</b>	<ul style="list-style-type: none"> <li>• You get skinny; you have bumps and sores; you don't eat much; you are miserable; you don't think properly at all.</li> <li>• You just deteriorate and feel all kinds of pain.</li> <li>• He [PWA] lost his friends.</li> <li>• They said he [PWA] must come out of the area and they don't want any "battyman in the area."</li> <li>• If somebody has AIDS they won't sit beside them, they won't use their cup or they won't sleep in the same bed.</li> <li>• Everybody just drifted away from her [PWA]... Others made fun at her.</li> </ul>
<b>Seriousness/Importance of AIDS to young adults</b>	<ul style="list-style-type: none"> <li>• It's a problem that no matter what you do, people will not take AIDS serious...People are more afraid of 'coke' than AIDS.</li> <li>• Young people have other things on their minds. Young people have one thing on their minds, hot clothes and sneakers. The [young] men want to see how much girls they can have in one month.</li> </ul>
<b>Persons vulnerable to getting AIDS</b>	<ul style="list-style-type: none"> <li>• You have street girls and whores. They sell their bodies....</li> <li>• .....Some ladies leave from here and go to Portland where sailors come down. Most of them [the sailors] tend to have AIDS so it tends to be spreading because of prostitution.</li> <li>• The schoolgirls,...they see these drug dealers....they see they can make some money without thinking of the harm they are doing to themselves.</li> <li>• Those who are homosexual, they have the AIDS virus.</li> </ul>

AIDS is generally perceived as a serious disease, but sometimes more importance is placed for example, on issues such as cocaine problems, and acquiring material possessions ( clothes and footwear). "Street girls," "whores," young school girls and homosexuals are thought to be more vulnerable than young adults themselves.

Young adult informants presented a range of reasons for use of a condom during sexual activity. See Table 4-29. These included protection from disease, lubrication purposes during sex, distrust of sexual partner, a safer protection method than withdrawal method, and for pregnancy prevention.

Table 4-29. Young adult perceptions about sexual activity and condoms

Domain	Common responses during interviews with young adults
Reasons for condom use during sexual activity	<ul style="list-style-type: none"> <li>• It protects you from disease.</li> <li>• ...It's not for protection...It's for the lubricant...if you're having sex with a girl and she's tight or something and you can't enter you just put on a condom.</li> <li>• ....Don't trust him. So he has to use a condom.</li> <li>• It's not safe just withdrawing.</li> <li>• Don't want to get pregnant.</li> </ul>
Reasons for condom nonuse during sexual activity	<ul style="list-style-type: none"> <li>• It feels uncomfortable. Women complain that it scratch them and they are afraid it will slip off.</li> <li>• You are not really having sex...It's just with this plastic bag or something. You are not making contact.</li> <li>• They [young girls] prefer sex "bareback."</li> <li>• It kills the nature...doesn't feel it's like having real sex with it.</li> <li>• The one he trusts he's not going to use a condom with, but the one who is just his standby, he uses protection with.</li> <li>• If you're circumcised you don't have to use a condom.</li> <li>• They use it with the girlfriend but not with the wife.</li> <li>• You don't have enough time to put it on.</li> <li>• They say it [the condom] gives you bumps.</li> <li>• Don't think it's 100% safe. Sometimes it bursts.</li> <li>• It kills the vibes.</li> <li>• You don't get the niceness out of it [sex] when you have it on.</li> </ul>

Reasons presented for not using a condom during sexual activity included: discomfort, wanting to have “bare back” sex, that is, sex in the natural, partner significance (partner who can be trusted vs other partner), disruption of the sexual mood and pleasure (killing the vibes), as well as fear of the condom bursting.

Condoms are commonly referred to as “Boots,” “Rubber,” “Socks” by young adults. See Table 4-30. Condoms are widely available throughout the St. Thomas. They can be obtained for free (via the health center or an off-duty health professional) or purchased at various establishments throughout the parish.

Table 4-30. Young adult perceptions about condom availability and accessibility

Domain	Common responses during interviews with young adults
Availability of condoms	<ul style="list-style-type: none"> <li>• Most places in St. Thomas have condoms...pharmacies...bars...</li> <li>• Most of the time they have “boots.”...ones you use to get at the clinic. We have some different ones... ‘Wet and Wild’ and “Power Play.”</li> <li>• You have this nurse lady that lives on the scheme...can always get condoms from her.</li> <li>• They’re at the health center.</li> <li>• You can buy them or get them. “Boots, Rubber, Socks!”</li> <li>• Yes, they have woman condom....</li> </ul>
Accessibility of condoms	<ul style="list-style-type: none"> <li>• Men and women buy condoms.</li> <li>• Sometimes you have to pay \$10 for them but if you don’t have it they [at the clinic] will give you.</li> <li>• They are free.</li> <li>• It is easy to purchase one. Some people don’t like to purchase it....Because they go into a store and ask for the condom and everybody knows that you’re going to have sex or something.</li> <li>• Mostly guys buy. I really don’t see a lady buy condom.</li> <li>• How the society is...when people see a girl buy a condom, she’s a sketel or one of them little words they use.</li> <li>• They don’t give them [woman condom] out at the clinic...they don’t have at the store. They’re expensive, one for \$100..</li> </ul>

During participant observation, several places were located where condoms could be purchased within the Morant Bay area. Condoms were being sold in several



bars/taverns, a few clubs, two pharmacies, two supermarkets, a few assorted snack counters, in some boutiques and by street side vendors (two snack vendors and a “wrist watch and glasses” vendor).

The brands and costs of condoms were varied: *Rough Rider* (the most common that young men use), *Wet n Wild*, *Bare Back* and *Panther Stud*, all priced at J\$25; *Midnight*, *Kiss of Mint* and *Erotica*, all priced at J\$30, J\$30 and J\$35, respectively. One male informant indicated he had heard female condoms were available but did not know where they could be obtained in the community. He estimated the cost for one these at J\$100. During participant observation staff at the STD clinic reported that female condoms were only available through the Epidemiology Unit of the Ministry of Health, in Kingston.

Persons responsible for selling the condoms indicated that men preferred *Rough Rider* while young women went for *Wet n Wild* and *Bare Back*. Informants indicated both young men and women purchased condoms. However, males were more likely to do this. Young women who openly purchased condoms would be perceived as “sketel” (prostitutes). Sellers of the condoms also indicated that male customers were often shy about using condom brand names, and would ask instead, “Do you have any *socks* or *boots*?”

Participant observation also revealed that condoms were not easily accessible in terms of their location within the points of acquisition or purchase. At the health center, condoms are stored in a locked metal cabinet in the room where the STD clinic is held. Several boxes are taken out at the beginning of each clinic. Patients would be given a handful of condoms during the screening process of their visit. They would either be asked

to give J\$10 contribution or be given the condoms for free if funds are low. In addition, condoms could be obtained outside of clinic hours by asking the STD worker or health nurse who has access to the metal cabinet. Individuals can also acquire condoms during the weekly family planning clinic held at the health center.

In stores, supermarkets, and bars/taverns, access was controlled by the clerk or cashier at the counter where people typically paid for merchandise or services. Although condoms were displayed in plain view behind bar counters and on pharmacy shelves, they were hidden under the cosmetic/toiletry counter of supermarkets and grocery stores. This required the individual to ask for condoms instead of privately selecting and paying for the ones they wanted.

Further discussion during participant observation revealed that store/pharmacy personnel would often question young people as to their motives for wanting to purchase condoms. They pointed out that this line of questioning would dissuade quite a few of their potential customers from making the purchase. The end result would leave the clerk feeling successful in “saving” another young person from participating in “those things.”

Informants indicated that there had been previous HIV/AIDS prevention efforts targeted toward young adults in St. Thomas. See Table 4-31. These efforts have included: use of guest speakers during NYS orientations, use of videos, talks by high school teachers, family life talks involving condoms, teen rapping and church group discussions.

To meet the HIV/AIDS prevention needs of young adults in the community, informants suggested that health officers in the community “toughen up” on their approaches. They advocated encouraging condom use, as well as increasing HIV/AIDS prevention education that utilizes methods such as films, videos, and open

Table 4-31. Young adult perceptions about HIV/AIDS prevention

Domain	Common responses during interviews with young adults
<b>HIV/AIDS prevention for young adults</b>	<ul style="list-style-type: none"> <li>● Only during [NYS] orientation, they get guest speakers to come in and tell you about it...they showed videos on sex and AIDS...</li> <li>● Sometimes in high school, the school teacher comes in and talks about it....</li> <li>● Sometimes we have family life talks. The teacher usually walks with condoms....</li> <li>● As a young leader in the community...I tend to rap with young teenagers my age.</li> <li>● ...I talk to them about it...even in our church group.</li> <li>● My grandmother...she has taught me that if you are going to talk to a person you have to get to know them well before having sex.....</li> </ul>
<b>HIV/AIDS prevention needs</b>	<ul style="list-style-type: none"> <li>● The health officers have to come up front and say use a condom. They have to tough up.</li> <li>● Show some films in the community and after that have a lecture about AIDS.</li> <li>● They have to educate more....The government or the hospitals or clinics...they can have like a film show. You rarely see that.</li> <li>● They should have a special program, show a video about how you can catch AIDS and what it will do to you.</li> <li>● More talks need to be done.</li> <li>● I would like to see somebody come into the community and talk to youngsters about AIDS.</li> <li>● Give them [young people] condoms.</li> <li>● I feel they are supposed to employ more social workers to go in the community and go to the youth clubs and sit with young people and talk to them and get their feedback.</li> <li>● They need to go out in the communities and educate the uneducated because if they don't go the problem is getting worse. Ask them what is AIDS and what they think about it.</li> </ul>

talks/discussions about getting AIDS and its consequences which allow for feedback from participants. Informants felt the government, the hospital, the clinic and social workers as well as young adults themselves should participate in these ventures.

An AIDS talk given to members of the Morant Bay Police Youth Club, represented one of these AIDS prevention efforts. At the invitation of the club's sponsor, the community social worker/police officer, a public health nurse and the researcher were asked to be guest speakers during one of the club's bi-monthly meetings. A number of

youth, between 17 and 24 years of age attended. The discussion session revealed that young adults were responsive to the idea of entering into a dialogue about the range of issues surrounding AIDS and their own protection.

Young adults engaged in a frank discussion with the researcher and the public health nurse about issues of vulnerability, safe sex, monogamy, fear of persons with AIDS and what should be done by national and local leaders to help those with AIDS. The evening ended with a request for another session to clarify information. Several inquired about obtaining condoms at the health center. Two young adults inquired about testing services at the health center. One indicated he would present himself for testing during the next scheduled STD clinic. (He and his partner did appear for testing at the health center STD clinic later on that week but were denied testing on the grounds that they were not in the "high risk" group).

The issues presented by community leaders were organized into ethnographic domains related to young adults' beliefs about the importance of AIDS, its characteristics and consequences, their personal vulnerability, attitudes towards protection, reasons for sexual activity with and without condoms; condom availability and accessibility and HIV prevention for young adults.

Community leaders, like young adult informants, believed that young adults were not taking the threat of AIDS in their community as seriously as they should. Young adults approached the issue of AIDS with an air of nonchalance. Economic position and the need for money, governed the level of attention this disease receives from this group of individuals. Community leaders reported that young adults treated AIDS as any other STD. Consistent with perceptions offered by young adult informants was the perception that AIDS is primarily a homosexual disease. See Table 4-32.

Table 4-32. Community perceptions about young adults and AIDS

Domain	Responses during Interviews with Community Leaders
<b>Level of Seriousness/ Importance of AIDS to young adults</b>	<ul style="list-style-type: none"> <li>Some take it seriously but others are just nonchalant.</li> <li>I don't think they take it seriously.</li> <li>It is of concern only from a theoretical standpoint.</li> <li>AIDS is a concern when it comes to economics...Unemployed youth go to bed for economic position and to access money.</li> </ul>
<b>Characteristics of AIDS</b>	<ul style="list-style-type: none"> <li>It is seen as any other STD, they think you can catch it by sexual intercourse.</li> <li>Young men especially believe AIDS is a homosexual disease.</li> <li>Some people are of the perception that the AIDS victim can be identified by just looking at them.</li> <li>They fear you can get it from mosquitoes</li> <li>You get it...somebody "obeah" you...Yes, use witchcraft.</li> </ul>
<b>Persons thought vulnerable to getting AIDS</b>	<ul style="list-style-type: none"> <li>Most of them see AIDS as affecting prostitutes and homosexuals.</li> <li>Once they are not homosexuals they don't really believe AIDS comes to their streets.</li> <li>They feel it can't happen to them. They feel as if it is not in the community.</li> </ul>
<b>Consequences of AIDS disease</b>	<ul style="list-style-type: none"> <li>If you want to be isolated, just tell somebody you have AIDS.</li> <li>If a person in the community is found out to have AIDS, that person will be treated with hostility.</li> <li>There will be scorn and suspicion.</li> </ul>
<b>Attitudes towards taking precautions from HIV/ AIDS</b>	<ul style="list-style-type: none"> <li>Most of them know that with unprotected sex they will become infected but they still continue to have unprotected sex, trusting the person.</li> <li>I try to tell them to use a condom or have one faithful partner. Men on a whole will tell you that if they have one partner, they don't feel as if they are okay. Young women generally don't have one partner.</li> <li>Some of them relate it just the same as gonorrhea and syphilis, that if they go in the sea and have sex in the sea, they won't catch it. The sea will wash away what they [their partner] has.</li> <li>Young men will look for a virgin girl because virgins will take away what they have.</li> <li>Most of young people are engaging in oral sex....they call it safe because you can't get pregnant...you can't get it [AIDS].</li> </ul>

A common perception was that the disease is commonly acquired through sexual intercourse, but may be acquired by mosquitoes or through the performance of "obeah" (witchcraft) on a person. Community leaders, as young adult informant, believe young adults see prostitutes and homosexuals as the more vulnerable groups in the community, rather than themselves. In addition to the physical consequences presented by young

adult informants, persons with AIDS experienced social isolation from family and friends, as well as the hostility, scorn and suspicion of the community at large.

Community leaders reported that young adults were aware of the utility of protective measure such as wearing condoms and sticking to one partner. Some young adults complied with condom use for STD prevention but more so as a means of preventing unwanted pregnancy. Men were inclined to use condoms but only with outside partners. One informant implied that social standing within society was directly related to condom use.

Community leaders presented a range of issues associated with the lack of condom use by young adults. See Table 4-33.

Table 4-33. Community perceptions about young adults, sex and condoms

Domain	Responses during Interviews with Community Leaders
Reasons for condom use during sex	<ul style="list-style-type: none"> <li>• They will more use it to prevent pregnancy than STD.</li> <li>• If they are going out there they [men] will use a condom</li> <li>• Mostly those in the upper social groups will make it a point of their duty to use a condom.</li> </ul>
Reasons for condom nonuse during sex	<ul style="list-style-type: none"> <li>• Males do not think that a condom is necessary unless you are out and about with different partners.</li> <li>• Men don't use condoms with the person in the home or person they know for a time.</li> <li>• Our men believe that condoms deaden the vibes....</li> <li>• It may be cultural; there is this thing in our culture where "skin to skin" is best and if you love me you would not want to use a condom.</li> <li>• Using a condom suggests you are not faithful.</li> <li>• Churches don't support the use of condoms...they will say you are wasting your seed.</li> </ul>

From their perspective, young adults failed to use condoms for protection because: males don't deem it necessary unless they have multiple partners; condoms lessen the sexual mood; "skin to skin" signified a deeper love for the partner; use signifies

unfaithfulness of the partner; the lack of support by the church in the community. Several of these opinions are consistent with those shared by young adult informants.

Unlike young adults, community leaders were not of the opinion that condoms were widely available. Condoms were deemed to be unavailable in places that young adults frequent. There was greater accessibility to males than to females as a result of societal pressures. Females were more embarrassed to acquire condoms than males. See Table 4-34.

Table 4-34. Community perceptions about condom availability and accessibility

Domain	Responses during interviews with community leaders
Availability of condoms	<ul style="list-style-type: none"> <li>• I don't think it's widely available because some of the bars, agencies, schools, where young people actually go.</li> <li>• You find them more at the pharmacy and selection places.</li> <li>• A majority of them believe those they get at the health center are not as strong as those they purchase.</li> </ul>
Accessibility of condoms	<ul style="list-style-type: none"> <li>• Young men generally get the condoms.</li> <li>• Young women are afraid because they are seen as loose</li> <li>• They [females] are embarrassed to get condoms</li> </ul>

All informants attested to the fact that there had been prevention efforts in ST. Thomas. See Table 4-35. Efforts have included: use of print and electronic media to advertise condoms and present information on HIV and AIDS, periodic AIDS campaigns involving information displays in the small public library, health education being given in some high schools and youth clubs, and "market marches" where condoms were distributed, the Nationally mandated community AIDS prevention campaign, Face-to-Face (which was defunct by the time this data was collected), an assortment of workshops and

Table 4-35. Community perceptions about HIV/AIDS prevention

Domain	Responses during Interviews with Community Leaders
HIV/AIDS prevention for young adults	<ul style="list-style-type: none"> <li>• Yes there are some AIDS campaigns. We have one specific day--AIDS day.....we normally have a display in the library, health education in schools and youth clubs. Sometimes they have marches leading up to AIDS day.</li> <li>• They have been using the DJ to provide lyrics encouraging use of condoms.</li> <li>• We do "market march" where we give talks in the market and issue condoms.</li> <li>• We have had rap sessions but they have not been successful because community leaders did not participate.</li> </ul>
	<ul style="list-style-type: none"> <li>• We have the Family Planning Board... They meet with a group of men, you call them 'male motivators'. These are people who you train using workshops and lectures with the hope that they would go back out to their communities....</li> <li>• Use to have community initiatives where uneducated are educated about AIDS---Face-to Face</li> </ul>
HIV/AIDS prevention needs of young adults	<ul style="list-style-type: none"> <li>• Factors to consider when planning AIDS prevention ....their family system and attitudes, culture, social and economic factors, religious beliefs.....</li> <li>• ...You would have to come with a method to use that is easy to grasp for some of the persons. ....You would have to bring some charts and a model of an organ with the condom and provide some educational jokes during the presentation.</li> <li>• Getting young people to participate in health education. For example, use a role play situation.</li> <li>• There will be rapping sessions but that is going to be with videos and a lecture.</li> </ul>

sessions for community youth leaders, the National Family Planning Board local initiative involving "male motivators" and guest speakers during NYS orientation sessions.

Community leaders were convinced that in order to attend to the future needs of young adults, they would have to pay closer attention to factors such as family system and attitudes, cultural, social and economic factors, religious beliefs and sexual orientation when planning AIDS prevention. The methods of education for the community would have to be simple ones (easy to grasp), and could include the use of charts, use of a



models to show condom use, and use of humor during presentations. In addition, youth discussions (“rapping sessions”) would have to incorporate the use of videos and a lecture.

### Thematic Analysis: Local Explanations

Themes represent elements in patterns that constitute a culture or social situation. Each theme connects the relationship among domains of cultural meaning. (Spradley, 1979). In this analysis, attention was focused on the actual words and sentences used by the participants as well as the context in which they arose. Based on the domains examined, several thematic clusters arose, many of which included several subthemes.

#### AIDS Knowledge, Beliefs and Perception of Vulnerability

A major underlying theme that emerged from interview data is: *Misconceptions about disease transmission, character, protection, importance and vulnerability, continue to persist among young adults, despite consistently high levels of biomedical AIDS knowledge.* This composite theme is composed from several subthemes.

(1) In the minds of young adults, *AIDS is mainly a homosexual disease, which originated in the US and was brought to Jamaica either by tourism or by returning residents.* As one informant put it

The young people believe AIDS is real but young men especially believe AIDS is a homosexual disease. Once they are not homosexuals they don't really believe AIDS comes down their street . . .

(2) *Misconceptions about HIV transmission and protection are associated with knowledge and cultural beliefs about the etiologies of other forms of illnesses and disease in Jamaica.* Mosquitoes and witchcraft (obeah) cause illnesses. The assistant health educator attested to these beliefs:

You can catch it from mosquitoes; that is a fear also.

Through conversations I have heard if somebody has it, it might be that somebody "obeah" them. . . . Yes, use witchcraft. . . . Yes, they get information from the obeah person.

(3) *Protective measures such as sexual abstinence and monogamy conflict with health beliefs about sex and cultural norms about mating.* As one key informant explains:

About not having any sex. . . . It is the socialization because they say that if the young man doesn't get release it will "cake up in his back." Some of the young ladies have sex to lessen period pain.

Another key informant provide this illustrative response:

I try to tell them to use and condom or have one faithful partner. Men on a whole will tell you that if they have one woman, they don't feel as if they are okay. Young women generally don't have one partner.

(4) *Culturally rooted health practices are being utilized in lieu of recommended protective actions.* For example, young adults believe sex in seawater and sex with a virgin will cure AIDS. The assistant health educator for the parish, the STD clinic worker and a peer educator offered explanations pertaining to these practices:

I have come across some and heard some of them relate it [AIDS] just the same as gonorrhea and syphilis, that if you go in the sea and have sex in the sea, then you won't catch it because sea water will wash it away. Those are the views I have heard. I think they get those views from older men who are around them.

You find that they [young men] will look for a virgin and younger girls because virgins will take away what they have. Most are having sex in the sea, so the sea will wash away what they will have.

(5) *Daily social and economic pressures faced by young adults rank higher in importance than AIDS.* Comments from one young adult key informant and a community leader lend perspective on social and economic pressure:

Young people have other things on their minds. Young people have one thing on their minds, hot clothes and sneakers. The [young] men want to see how much girls they can have in one month.

They think it is a serious problem to an extent. AIDS is a concern when it comes to economics, because young people who are lower income earners would see sex as a medium for economic gratification.

(6) *Young adults are in denial about their personal vulnerability to HIV. When they do acknowledge the possibility, they adopt an attitude of fatalism.* The peer educator attested to their denial of vulnerability :

When I talk to some young people regarding HIV, they feel like it cannot happen to them. They feel as if it is not in the community. . . . They feel as if what you are trying to say to them is for the sake of saying it. I don't think they are totally ignorant of the fact of HIV. It is just that they feel it cannot happen to them. You tell them about condoms but they say they prefer to ride "bareback". . . without a condom.

The youth service coordinator presented an example of this fatalistic attitude by many young adults:

According to them, "something will have to take you out and I may just leave here and a vehicle hit me." So AIDS is one of them things.

### Factors Influencing Sex Practice (Sex and Condoms)

Several themes emerged from discussions regarding sex and using a condom:

(1) *Sex with a condom is viewed as unnatural, disruptive to sexual pleasure and uncomfortable.* Several key informants expressed a variety of opinions regarding young adults' attitudes towards condoms use in relation to sexual pleasure and enjoyment:

It kills the nature . . . and it doesn't feel like you're having sex.

You're not really having sex. . . . It's just with this plastic bag or something. You are not making contact.

You don't get the niceness out of sex when you have it on.

Our men believe that condoms deaden the vibes so you will find that you are not getting much of our men if they have to use the condom. . . . It is the way they are socialized. They [young males] tend to shy away from using condoms.

Women complain that it scratch them and they are afraid it will slip off.

(2) *Condoms are used to facilitate penetration during sexual intercourse.* One male young adult indicated that use of condoms during sex could be beneficial.

Lubrication, which is essential for ease of sexual, activity, could be enhanced via condom use. He stated that

Most of the times when my friends use condoms it's not for protection. . . . It's for the lubricant . . . if you're having sex with a girl an she's tight or something and you can't enter you just put on a condom.

(3) *Decision to use versus not to use condoms is affected by the level of trust and the type of relationship between sexual partners.* Young adults and community leaders alike shared similar views about condoms, trust and partner preference:

The one he trusts he's not going to use a condom with, but the one who is just his standby, he uses protection with.

They use it with the girlfriend and not with the wife.

If I'm not sure what he's doing when I'm not with him. I tell him I don't trust him. So he has to use a condom.

(4) *Use of condoms suggests promiscuity and unfaithfulness.* Informants shared that young adults who suggest condom use fear their partners may think they have been promiscuous or unfaithful:

Using a condom suggests you are not faithful.

There are many females that are not promiscuous and are faithful to their man. They are not using the condom because they are of the opinion they are faithful . . . and they expose themselves because they don't know what their man is doing out there. Men don't use condoms with the person in the home or person they know for a time. Sometimes they will use it out there.

(5) *Pressure from sexual partner may influence the decision not to use a condom.*

In an effort to please sexual partners and show love, young adults, particularly females, may respond to male pressure to have sex without a condom:

It may be cultural; there is this thing in our culture where “skin to skin” is best and if you love me you would not want to use a condom.

(6) *Social class influences the consistent use of condoms during sex.* One key informant suggested that social background plays an important role in how fastidious young adults are in taking precautionary measures such as using a condom. He stated:

What I find is that only a few that are careful about using condoms. Mostly those of the upper social groups that will make it a point of their duty to use a condom.

(7) *Condoms are used more for pregnancy prevention than for STD prevention.*

Several key informants believed that young adults use condoms to prevent pregnancy rather than disease prevention:

They will more use it to prevent pregnancy than STD.

They don't want to get pregnant.

It's safer than withdrawing.

(8) *Religious beliefs prohibit condom use.* Two informants pointed out the influence the religious beliefs on young adults in the community:

I talk with this man and he said his religion don't believe in using condoms. He said that you are to multiply. You are wasting your seed when you use a condom. . . . Some young persons will say they are wasting their seed.

#### Factors Affecting Condom Resources (Availability and Accessibility)

Two major themes emerge when assessing condom resources. The first is: *Condoms are widely available.* Key-informant interviews and participant observation revealed that condoms existed in a variety of places, with a variety of choices, for a variety

of prices. One informant even alluded to the availability of female condoms in the community but could not indicate where. Young adults had the options to acquire condoms for free or purchase them at minimal cost from. Several informants indicated that young adults showed preference for condoms sold in the stores over those given for free or at minimal cost at the clinic. Free condoms from the health center were perceived as being inferior to those being sold in shops. These condoms were thicker, carried an odor and felt slippery. As one informant indicated:

Yes, a majority of them believe that those they get at the health center are not as strong as those they purchase in the shop. They say it is thicker and it smells of the oil that they use on it. They also feel slippery.

These condoms were imported from Korea and distributed by the Ministry of Health to local health centers throughout Jamaica. The health educator, whose job it was to coordinate condom promotion efforts, expressed dissatisfaction with the present state of availability:

Not widely. I don't think it's widely available because some of the bars, agencies, schools, where young people actually go, I don't see condoms available. You find them more at the pharmacy and selective places.

The second underlying theme relates to condom accessibility: *Condom access is limited by fear, embarrassment, and condom location within points of acquisition.* Young women fear being branded as prostitutes if they purchase condoms. As key informant put it

How the society is . . . when people see a girl buy a condom, she's a sketel or one of them little words they use.

The young men generally get the condom. The young women are afraid because they do not want to be seen as loose.

Embarrassment works as a major deterrent for young adults. One key informant expanded on this:

Some people don't like to purchase it. . . . Because they go into a store and ask for the condom and everybody knows that you're going to have sex or something.

Participant observation confirmed the location of condoms behind cashiers and shop counters limits privacy and choice.

### Factors Influencing HIV/AIDS Prevention

A major underlying theme emerging from interviews and participant observation is the following: *A variety of strategies have been used to inform young adults and the community about HIV/AIDS and prevention.* Informants presented a range of strategies that had been utilized to disseminate information about AIDS and to promote condom use. These have included:

Yes there are some AIDS campaigns. We have one specific day--AIDS day . . . we normally have a display in the library, health education in schools and youth clubs. Sometimes they have marches leading up to AIDS day.

We do "market march" where we give talks in the market and issue condoms.

We have the Family Planning Board... They meet with a group of men, you call them 'male motivators'. These are people who you train using workshops and lectures with the hope that they would go back out to their communities. . . . We train them and hope they go out into their community

Use to have community initiatives where uneducated are educated about AIDS--- Face-to Face

Another major underlying theme that emerged from the interviews follows:

*Sociocultural and economic pressures, psychosocial issues, lack of community participation and poor attitudes of the church community as well as the lack of personnel who can work with young adults have limited the success of HIV/AIDS prevention. Each*

of these factors are critical to sexual transmission of HIV and subsequent acquisition of AIDS among young adults. A more detailed account of these factors was sought through conversations with key informants who have been behind some of the prevention efforts in the community. From the perspective of the assistant health educator for the parish, health education as a prevention strategy has been challenged by several of these factors:

Health education is a challenge because you go out there and you are teaching health education but you have to look at other issues such as social and economic. Many of them get into sex, especially the young ladies because they don't have money. So by having a man they will get money. To tell a man to use a condom, [they say] I can't because he might just box me about so I will do exactly what he wants.

From an economic point of view, it has to do with how much the education will be taken on board. Even if they take it seriously how are they going to come out of this situation, where they can protect themselves? I may as well stick with this man regardless of the fact that he has several other partners.

Socially, there are not enough recreational activities for young people so that they can put their energies elsewhere, instead of having a boyfriend. Self-esteem has a lot to do with some of the things that young people do; if they don't feel good about themselves, getting into a relationship because a man says, "I love you" will be easy. He might be the first person to tell them that.

Young adult informants also share some of what they saw as limitations to AIDS prevention:

We have had rap sessions but they have not been successful because community leaders did not participate.

They have to educate more. . . . The government or the hospitals or clinics . . . they can have like a film show. You rarely see that. I feel they are supposed to employ more social workers to go in the community and go to the youth clubs and sit with young people and talk to them and get their feedback.

Churches in the community don't usually support the use of condoms. They don't generally support contraceptives. Churches usually have a major influence on the beliefs of the community. As the influence from the wider society comes the church diminishes.



The shared perspective of the community social worker/police officer reiterated some of the key points made by the health educator and young adults:

People come in such as nurses and doctors. They give practical advice on how to use condoms. Clubs usually have that type of theoretical and practical discussions. The churches don't support that.

Finally, the coordinator of the former "Face-to-Face" AIDS initiative added his perspective on additional factors to take into consideration:

The population in my community is sixty five percent literate, the others cannot read. You have people moving out to work at other places. It is a mainly farming community so if you are going to educate the community on HIV you would have to come with a method to use that is easy to grasp for some of the persons.

In terms of future efforts, the underlying theme was *Organizers of HIV/AIDS prevention are willing to confront these limitations by exploring and utilizing health education methods that will encourage active participation from young adults and other community members*. The health educator and community social worker/police officer shared some perspective on the need for new approaches to educating young people about:

More, education. But, education with a difference. Getting young people to participate in health education. For example, a role play situation. It will actually come home to them more or quicker because once you take on role play, you are actually involved. . . . What we are hoping to do is to take a different approach. We have had rap sessions but they have not been successful because the community leaders did not participate. Maybe we have to go where they are, in the church or find out when they are having a conference and then we do education there. . . . The community health aide is concerned with irresponsible behavior and she knows the HIV cases in the area. That is why we are starting our campaign in that area. . . . There will be rapping sessions but that is going to be with videos and a lecture. I find very interesting is that when we go out to do health education [young] people are always interested in asking questions related to AIDS . . . I find a lot of them are always asking questions but still their practices are not changing.

I can't say that in St. Thomas enough is not being done. What I know is that once the young start feeling better about themselves, a number of people in St. Thomas and the self worth is not there. Once you find that these same persons, that yesterday were unemployed and had low self-esteem, and they start working and

earning something of their own today, then you find their self esteem building so much that even in their sex life there will be a concern about what they do . . .

I believe that once a person raises his self-esteem and that has socio-economic implications, then they will see AIDS and HIV in a different light. We have the Family Planning Board that meets once per month. They meet with a group of men, you call them "male motivators." These are people who you train using workshops and lectures with the hope that they would go back out to their communities and you have youth leaders, and teachers from different strata of the society and they have to deal with young people. They are expected to educate their peers by giving them condoms and leaflets. Apart from helping to build the self-esteem; that is one of the problems that I find. If we can work on that, then we can definitely have something going for us.

Yes they [farming community] are enthusiastic to get the information and to learn but how quickly they will grasp the information is doubtful. You would have to bring some charts and a model of an organ with the condom and provide some educational jokes during the presentation.

### Cultural Appropriateness of Themes

Themes emerging from interviews and participant observation were situated within the context of culture, in order to assess their cultural appropriateness. The themes were assigned to PEN-3 categories of positive, existential, and negative. Positive themes represented those issues that were critical to empowering young adults and their community to deal the threat of HIV and AIDS. Existential themes were those issues indigenous to young adults and their community, that presented no AIDS-related threats to the population. Finally, negative themes were those that presented serious threats to preventing HIV and AIDS among young adults in the community.

Positive themes (Table 4-36) lend insight into issues that can be strengthened and reinforced. Existing high levels of knowledge, condom use motivated by trust and relationship status, condom use for pregnancy prevention, high condom availability, inexpensive access to condoms, existing prevention strategies and community awareness

of needs and changes, all represent unique entities that can be encouraged, expanded and enhanced to result in the cultural empowerment of individuals, extended family and community.

Table 4-36. Positive AIDS-related themes

<b>POSITIVE: CULTURAL EMPOWERMENT TO DEAL WITH HIV/AIDS</b>	
•	Consistently high levels of AIDS-related knowledge exist among young adults.
•	Decision to use condoms is affected by the level of trust and relationship type. Distrust and "outside" (girlfriends) partners motivates condom use.
•	Condoms are used more for pregnancy prevention than for STD prevention.
•	Condoms are widely available.
•	Condoms are free and inexpensive.
•	A variety of strategies---electronic and print media campaigns, community marches, "rap" (discussion) sessions, family life talks, condom demonstrations--- have been used to inform young adults and the community about HIV/AIDS and prevention.
•	Organizers of HIV/AIDS prevention efforts are willing to explore and utilize health education methods that encourage active participation from young adults and other members of the community.

Existential themes (Table 4-37) pose an interesting challenge to assessing their significance in AIDS-related issues among young adults. Misconceptions that arise out of knowledge of disease patterns, use of supplementary health practices, alternate condom use motivation and demographic issues such as social class, may not in any way hinder HIV/AIDS prevention among young adults. On the other hand, depending on how they are channeled, they may act as barriers to dealing with other critical AIDS-related issues.

Table 4-37. Existential AIDS-related themes

<b>EXISTENTIAL: NO AIDS-RELATED THREAT</b>	
•	Misconceptions about HIV transmission and protection are associated with knowledge and beliefs about the etiologies of other forms of illnesses and disease in Jamaica. For example, mosquitoes and obeah cause AIDS.
•	Condoms are used to facilitate penetration during sexual intercourse.
•	Social class influences the consistent use of condoms during sex.

Negative themes represent beliefs, attitudes and actions that present threats to health and well-being to young adults. See Table 4-38.

Table 4-38. Negative AIDS-related themes

<b>NEGATIVE: AIDS-RELATED THREAT</b>	
•	Misconceptions about disease transmission, character, protection, importance and vulnerability, continue to persist among young adults
•	AIDS is mainly a homosexual disease, which originated in the US and was brought to Jamaica either by tourism or by returning residents.
•	Protective measures such as sexual abstinence and monogamy conflict with health beliefs about sex and cultural norms about mating.
•	Culturally rooted health practices are being utilized in lieu of recommended protective actions.
•	Daily social and economic pressures faced by young adults rank higher in importance than AIDS.
•	Young adults are in denial about their personal vulnerability to HIV and AIDS.
•	Young adults adopt a fatalistic attitude towards AIDS.
•	Sex with a condom is viewed as unnatural, disruptive to sexual pleasure and uncomfortable.
•	Decision not to use condoms is affected by the level of trust and type of relationship among sexual partners. Blind trust and status as a wife will deter condom use.
•	Use of condoms suggests promiscuity and unfaithfulness.
•	Pressure from sexual partner may influence the decision not to use a condom.
•	Condoms are used more for pregnancy prevention than for STD prevention.
•	Religious beliefs prohibit condom use.
•	Condoms from the STD clinic are labeled as inferior, uncomfortable and as having an odor.
•	Condom access is limited by fear, embarrassment, and condom location within points of acquisition.
•	Sociocultural and economic pressures, psychosocial issues, lack of community participation, poor community attitudes as well as cultural and religious beliefs have limited the success of HIV/AIDS prevention.

Misconceptions, belief conflicts, denial, fatalism, displeasure, trust, partner pressure, religious constraints, lack of access, economic, sociocultural, psychosocial factors as well as stringent religious beliefs represent the scope of themes or issues that will ultimately act as barriers to improving AIDS awareness and changing beliefs and

practices that promote vulnerability among young adults. These should be targeted for intervention by those involved in HIV/AIDS prevention.

### Discussion

A discussion of the ethnographic results as they relate to clarification of the survey findings will be presented here. In addition, an assessment of the cultural features of HIV/AIDS and young adults in St. Thomas as outlined by the cultural appropriateness dimension of the PEN-3 model are presented in this section.

#### Knowledge of HIV Transmission, AIDS Disease and Self-protective Actions

Both the survey and rapid ethnographic assessment demonstrated that knowledge and awareness about HIV and AIDS related issues was high among the young adult population. Unfortunately, several misconceptions continued to persist regarding the nature and character of HIV and AIDS. For example, both the survey and rapid ethnographic assessment revealed that young adults were still concerned about transmission of and protection from HIV via mosquito bites, by animals or by witchcraft. Thematic analysis revealed that ideas about transmission are closely tied to knowledge and cultural beliefs about the etiology of illness and disease in Jamaica. Sobo (1993) alludes to this in her work on health and the Jamaican body. In addition, the notion that AIDS is primarily a homosexual disease originating in the US is still strong among the young adult population. This stems from the early association of the disease with the homosexual community in the United States.

Regarding self-protective measures, young adults were highly knowledgeable about ways to protect themselves. Rapid ethnographic assessment revealed that in lieu of

commonly recommended protective methods, young adults utilized other culturally accepted procedures as a means of protection from AIDS. For example, young adults viewed sexual activity carried out in seawater as a precautionary method from STDs such as AIDS. Salt from seawater has always been recognized for its curative or therapeutic properties. Therefore, it is not unusual for some Jamaicans to deem it a viable means of protection from infection.

### Beliefs about the Importance of AIDS and Personal Vulnerability

The survey revealed that equal numbers of young adults placed high versus low importance on AIDS. Rapid ethnographic assessment provided an explanation for this occurrence. Daily economic and social pressures place young adults in a position where sex is exchanged for money and where sexual prowess is used as a mark sexual maturity. These take precedence over the attention young adults would give to the consequences of having a disease such as AIDS. It is well documented that the poverty problem in Jamaica is a rural agricultural one (Handa, 1995). Thus young adults in agricultural regions such as St. Thomas exist in poor economic conditions that challenge their ability to meet the economic demands of daily needs such as food, clothing, transportation and shelter. In addition, young adults struggle to afford the costs of post-secondary training need for gainful employment in areas that require higher technical skills and pay higher wages than paid for agricultural labor. It is not uncommon for young adults, particularly young women, to enter into negotiation of sex for "economic gratification" with, for example, men who frequent drinking establishments or who are alleged drug dealers in the community.

Close to half of the respondents in the survey felt they were not vulnerable to HIV and AIDS. The survey later showed however that these same young adults were no more inclined to practice safe sex than their peers who reported being at higher vulnerability for HIV and AIDS. Explanations for this discrepancy was later apparent in themes presented in the rapid ethnographic assessment. Young adults were inclined to underestimate their own vulnerability because of their attitudes of denial and fatalism. Young adults were more inclined to label groups such as homosexuals as being more at risk than themselves. This would not be unusual as earlier epidemiologic patterns of HIV and AIDS were closely associated with these groups (Figueroa, 1989). Despite the obvious shift in pattern to that of a heterosexual one, national mass communication as well local information campaigns have done little to change the persistent widespread notion that AIDS purely a homosexual disease.

Chevannes (1993) points out that individuals, men in particular, believe that homosexuals or "battymen" are products of deviant socialization. Hence, it is only natural that become the of dangerous diseases. With this in mind, young adults who deem themselves healthy heterosexuals, pay little or no attention to the threat of HIV and AIDS among their own population. In addition, if and when young adults do consider the possibility of getting HIV and AIDS, they take a very fatalistic approach. They accept the inevitability of death from a disease such as AIDS and view prevention as a futile and wasteful endeavor. Therefore, both denial and fatalism have acted as obstacles to that hindered prior HIV/AIDS efforts targeted toward attitude and behavior change among young adults.

### Sexual Practice: Using or Not Using Condoms During Sex

According to the survey, sexual practice (sex without using condom) was not associated to with knowledge, beliefs, or prior STD experience. Higher levels of knowledge and beliefs did not translate into reduction in tendency to have unsafe sex (i.e. sex without using a condom). Prior STD experience also did not translate to safer sex practice. These findings are consistent with several explanations for unsafe sex practices (sex without using condoms) were advanced through themes that emerged from the ethnographic assessment. Many young adults view the idea of safe sex via abstinence and monogamy as conflictive with known cultural values. Chevannes (1992) points out in his review of Jamaican sexual values and attitudes, the request of sexual abstinence as a precautionary measure is unrealistic. He states that

Sex is natural, meaning that the denial of libido is unnatural, and a potential source of ill health. . . . It is unwise to marry without knowing your spouse sexually.

The “having one faithful partner” method of self-protection also conflicts with the culturally established mating pattern in Jamaica. The pattern is one of multiple partnering, which involves having sexual relationships with several partners other than one’s spouse, common-law or steady partner. The suggestion of monogamy for the sake of protection from disease may also conflict with the cultural value placed of multiple partnering.

Condom use is negatively viewed as unnatural and disruptive to sexual pleasure. “Nature” is a synonym for libido and is strongly tied to sexual health. Natural sexual intercourse is closely tied to procreation as well as pleasure (MacCormack and Draper, 1987). Self-identity and social power are tied to sexual potency which manifests itself in the birth of a child (MacCormack and Draper, 1987). Condoms conflict with this cultural doctrine of “naturalness,” and sex for purposes of procreation. Both may act as potential



sources of ill health (Chevannes, 1992). On the other hand, the ease and pleasure of sex may be enhanced by condoms. Rapid ethnographic assessment revealed that young adults also utilize condom lubrication to facilitate ease of sexual intercourse. This can be seen as a positive facilitator of condom use that would serve a dual purpose of pleasure and protection.

Trust, as well as the significance of the sexual partner (a girlfriend versus a wife) may either negatively or positively toward condom use. Some young adults, particularly females, in trusting sexual partners, disregard the possibility of exposure to HIV and believe they are in sexually safe situation that does not require condom use. Chevannes and Mitchell-Kernan (1994) also posit that lack of condom use is promoted by feelings of trust generated in a relationship. On the other hand, mistrust of a partner or suspicion of disease may motivate use of a condom.

The rapid ethnographic assessment also uncovered the notion of selective condom use based on the mating relationships of young adults. Young men were more likely to use condoms with casual sexual partners ("standbys") than with steady partners or wives. Chevannes (1993) talks about mating relationships in terms of multiple partnerships and casual sex. Multiple partnerships refers to mating relationships with one or more persons other than one's steady partner. This type of partnering is commonly known as having the "outside woman" and less frequently accepted, the "outside man." Casual sex on the other hand, occurs with partners that may not necessarily share a psychological factor of commitment. In both circumstances, differential use of condoms will be associated with the level of commitment to or from the partner or partners involved.

Fear of being accused of promiscuous and unfaithful is a prohibitive factor in condom use. Young adult females, in particular fear asking their male partners to use condoms. On the other hand, women whose partners use condoms during sex, may suspect these partners of unfaithful behavior. In addition, young adults may be pressured into condomless sex as a mark of their commitment to the relationship and/or partner. Comments during the rapid ethnographic assessment suggest that there is male dominance in the in the sexual domain. Males may use the argument that “if you love me.....you’ll do it skin-to-skin”, thus pressuring their partners into having intercourse without condoms. Chevannes (1993) talks about this male dominance phenomenon in terms of being an outcome of the male socialization process, that starts with sex role differentiation and continues through adolescence and into young adult years. Their assertion of dominance, as ideologically and practically supported by family, community and the church, is justification for female subordination in sexual matters.

Social class, as alluded to by one informant, plays a role in use of condoms for protection. Social class was also related to consistent use of condoms. The rapid ethnographic assessment also revealed that there is some preference for condom use for pregnancy prevention. This finding is consistent with findings from the 1990-1994: Sexual Decision Making among Jamaicans (LeFranc et al., 1994). This study found that there was willingness to use the condom as a contraceptive, even though it is not well liked. This tendency can be potentially indirectly useful to HIV/AIDS prevention. Condoms may then be dually promoted as a way of reducing complications to social situations that may arise from unwanted pregnancy and as a means of disease protection. Finally, religious beliefs of some young adults also act as barriers to condom use. Biblical teachings such as

“be fruitful and multiply,” conflict with condom use for contraceptive purposes and subsequently for disease prevention. Again the notion of “naturalness” of sex as it relates to procreation is challenged.

### Condom Availability and Accessibility

Chevannes and Mitchell-Kernan (1994) point out that condom use had been for the longest time, a tabooed issue among Jamaicans, particularly males. Those who chose to do so, did so mainly to avoid pregnancy. With increased awareness about protection from STDs such as AIDS, condom use frequency has been increasing over the past few years. Two important factors that influence the use of condoms, and hence the practice of safe sex among young adults, is the availability and the accessibility of condoms in the community. Ethnographic field methods were able to show that condoms were widely available throughout the St. Thomas community.

Otherwise known as “Boots,” “Rubbers” and “Socks,” condoms could be obtained for free or at minimal cost at a number of locations visited by young adults. Brand name and cost seemed to play have some bearing on availability choices. In terms of accessibility, the rapid ethnographic assessment showed that condom access to young adults was limited by fear, embarrassment and awkward placement of condoms out of plain reach of clients or customers. Young women fear being branded as loose or “whores” if they attempt to acquire condoms. Both males and females were embarrassed about purchasing condoms. This was often precipitated by the attitudes of persons responsible for condom distribution in the community. Finally, lack of privacy to choose condoms at leisure was a major deterrent of having condoms located behind cash registers, pharmacy and bar counters, as well as in locked cabinets.

### HIV/AIDS Prevention

The steady increase in incidence of AIDS in the St. Thomas community, and particularly among the younger population, has prompted several mass media informational campaigns as well as specific efforts such as use of peer educators and guest speakers for youth groups. The impact of these efforts however, has been compromised however, by a range of mitigating circumstances that evolve out of the structural as well as sociocultural orientation of the St. Thomas environment. Informants presented a range of explanations regarding the lack of success of past prevention efforts. These included family and community attitudes about HIV/AIDS, young adults and sex, cultural and religious beliefs related to sex and condoms, social issues such as peer pressure, psychosocial issues such as low self-esteem, educational issues such as low literacy among young adults and community members and economic issues such as poverty and unemployment. All have limited the effectiveness of existing HIV/AIDS prevention education designed to effect behavior change among young adults.

In the meantime however, proponents and organizers of future efforts for prevention tailored toward increasing knowledge and changing behaviors, realize the need for newer and creative ways to present health information regarding HIV and AIDS. These would include for example, initiatives such as having rapping/discussion sessions that would be coupled with video as well as lecture presentations. This would facilitate more oral learning, and would prove effective with even low literate individuals. In addition, these individuals recognize the importance of including young adults as well as the family, the local and professional community and church in the planning, implementation and evaluation of HIV/AIDS prevention.

### PEN-3 Model of HIV/AIDS and Young adults

The PEN-3 model helped to present a local picture of the cultural appropriateness of several of the issues presented by both the survey and the ethnographic assessment. PEN-3 pulled together themes related to perceptions, enablers and nurturers to show the obvious yet sometimes hidden contextual features of young adults' beliefs and practices. From the perspective of the educational diagnosis dimension of the model, cultural perceptions such as "AIDS is carried mosquitos" and "condoms disrupt naturalness and pleasure of sex" demonstrate a need to resolve conflicts in young adults' minds regarding disease causation and protection. Enablers such as embarrassment and the limited access of condoms in pharmacies act as major deterrents or barriers to obtaining condoms in St. Thomas. Finally, the attitudes of nurturers such as pharmacy cashiers, obeah persons and the church strongly influence young adults' decision to use condoms for protection against HIV.

The cultural appropriateness dimension of the model provided a method of classification of cultural and structural factors so that the appropriate change strategies can begin to be matched to the targeted factor. In addition, use of the model demonstrated the ubiquitous nature of some of the beliefs and practices identified by the ethnographic assessment. The presence of culturally empowering, positive forces was evidenced by the high levels of knowledge and awareness about HIV and AIDS found among young adults in the study. The presence of indigenous, unharmful existential beliefs and practices was demonstrated by such actions as consulting obeah persons for information about HIV and AIDS. This act of seeking information through alternative channels could be potentially be considered a move toward taking action towards one own

well-being, and thus need not be targeted for change. Finally, practices such as having “skin to skin” or “bare back “ sex (condomless sex) as a means of proving love and fidelity demonstrates a negative action that has proven harmful effects and should be targeted for change.

The PEN-3 model also provided a way of demonstrating the ubiquitous nature of some of the beliefs and actions which may not have otherwise been apparent from a survey. For example, “condom use motivated by trust” was classified both as a positive and negative behavior. Failure to use condoms because of blind trust in a partner’s fidelity is considered to be a negative practice. Conversely, condom use as a result of distrust in a partner’s fidelity could be considered a positive practice. Both classifications stem from the realities of the environment in which young adults are having to navigate sexual relationships. On the other hand, a clear limitation of this model was that it did not uncover the extent to which several of the themes (positive, existential or negative) uncovered by the assessment influenced AIDS-related beliefs and practices. For example, the extent to which contextual factors such as trust and partner relationship predicts or influences the decision or intention to have condomless sex was not apparent from the data gathered. In that regard , models such as the Theory of Reasoned Action better facilitate a more systematic measurement of variables that are predictive of a person’s intended or actual behavior (Ajzen & Fishbein, 1980).

According to Airhihenbuwa (1995) the extended family, enablers and existential beliefs represent the strongest influence on the cultural production of knowledge and practices. Enablers are framed within the history, politics and power dynamics of the environment; the existential closely affirms cultural empowerment within the community;

and extended family ensures the longevity and vitality of traditions. All three must be viewed as balanced entities that culture influences and is influenced by young adults, their families and their neighborhoods within St. Thomas and within Jamaica.

### Summary

In summary, ethnographic assessment provided a number of findings that clarified and helped provide meaning behind findings of the survey. Through key informant interviewing and participant observation, this assessment confirmed that despite high levels of knowledge and awareness, young adults still fostered misconceptions about HIV and AIDS. Many of these stem from prior cultural understanding of illness and disease. The ethnographic assessment also confirmed that young adults do tend to underestimate their own vulnerability, often as a result of denial and fatalism. In addition, young adults, despite these high levels of knowledge, show little tendency to safe practices such as using a condom during sex. Ethnographic assessment uncovered several themes that lend explanation to why young adults would not opt for protective measures.

Protective measures such as abstinence and monogamy conflict with culturally rooted health beliefs about sex and beliefs about sexual socialization. In addition, young adults' ranking of AIDS with regard to economic and social pressures may make it less of a priority than to warrant protective measures. Protective measures such as condom use during sex are affected by a number of factors. These include: the view that sex with is unnatural, lacks pleasure and causes discomfort; trust versus distrust of sexual partner's fidelity; the status of the sexual partner; accusations of promiscuity and unfaithfulness; social class; pregnancy prevention concerns; religious convictions against contraceptive devices; limited condom accessibility as a result of fear, embarrassment and difficulty in

locating condoms when purchasing them; prior HIV/AIDS prevention efforts that have been limited by community attitudes, social and economic pressures, psychosocial issues, as well as low literacy levels.

The conceptual framework proposed for the study, the PEN-3 model, was helpful in pulling together a picture of the cultural appropriateness of issues examined in both the survey and ethnographic assessment. Also, assessment of themes related to perceptions, enablers, and nurturers demonstrated both the ubiquitous nature of the model's classification system and its inability to effectively predict relationships between contextual factors.



## CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary

A comprehensive understanding of the parameters of young adults' vulnerability to HIV and AIDS relies heavily on an assessment of the cognitive, behavioral and sociocultural issues associated with sexual transmission of the virus (Mann & Tarantola, 1996). This is crucial to the development and implementation of effective prevention strategies designed to reduce personal as well as social vulnerability to HIV and AIDS. This study was designed to accomplish three objectives. The study described the AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica. The study then examined the relationship between knowledge, beliefs and sexual practices. Finally, through a rapid ethnographic assessment of community AIDS-related perceptions and selected enablers, the study examined the nature and the context of knowledge, beliefs, and sexual practices. The culture-centered PEN-3 model was used as a guiding conceptual framework for this exploratory study.

The study employed an integrated methodological approach involving sequential triangulation of survey and ethnographic field methods. The first phase produced quantitative results and the second phase produced qualitative results that helped to clarify or explain the quantitative results. The sample population for the survey consisted of 58 young adults between the ages of 18 and 24 years old, who resided in the Eastern rural

Jamaican parish of St. Thomas. These young adults were recruited for the study through their affiliation with the National Youth Service program, which recruits young adults from the community for volunteer service within the community. The participants completed a face-to-face administered 50-question instrument designed to assess demographic characteristics, knowledge about HIV transmission, AIDS, self-protective actions, beliefs about the importance of AIDS and personal vulnerability, participation in vaginal, oral or anal sex, and participation in vaginal, oral or anal sex without using a condom over a year and month long period.

The sample for the ethnographic assessment consisted of ten young adults who had participated in the survey and seven community leaders, including an assistant health educator, an STD clinic worker, an STD/AIDS peer educator, a community social worker/police, the Eastern regional coordinator for the National Youth Service (NYS) program, the president of the Youth Leaders Association and a youth club leader/former coordinator of the community AIDS education initiative--Face-to-Face. Key informant interviews were used to assess community perceptions about AIDS and young adults, sexual activity and condoms, and selected enablers such as condom resources (availability and accessibility) and HIV/AIDS prevention. Participant observation also was used to assess condom resources and HIV/AIDS prevention education. The study was conducted between May, 1997 and August, 1997. Three research questions guided the study.

1. What are the AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica?
2. Is there a relationship between knowledge, beliefs and practices?
3. What does a rapid ethnographic assessment of community perceptions and

selected enablers reveal about the nature and context of AIDS-related knowledge, beliefs and sexual practices?

Frequencies and percentages were reported on knowledge, beliefs and practices garnered in the survey. Fisher's chi-squared analysis was utilized to examine relationships between categorical variables: AIDS importance and unsafe/safe sex practice, personal vulnerability and unsafe/safe sex practice. Fisher's chi-squared analysis was also utilized to examine relationships between additional variables: AIDS importance and gender, personal vulnerability and gender, and STD experience and safe sex. To examine differences in knowledge and sexual practices, beliefs and sexual practices, t-tests were conducted. Additional t-tests were done to assess differences in knowledge scores according to gender. Correlation analysis was done to examine associations between knowledge and belief scores. For the ethnographic portion, transcriptions from interviews and field notes from participant observation were analyzed via ethnosemantic analysis methods, which categorized information according to domains of information and cultural themes. Direct quotes were utilized in the analysis.

Results from the survey indicated there were no significant relationships between knowledge, beliefs, and practices, consistently. In addition, several of the findings from the survey reiterated previously reported findings. Levels of knowledge about HIV transmission, AIDS, and self-protective actions were high among young adults. Vaginal sex was the predominant form of sexual activity reported among young adults. Safe sex practice, as measured by a five-point likert scale and groupings related to the frequency of sex without condoms, was not prevalent among young adults who reported being sexually active over the past year. However, safe sex practice was more prevalent with those

young adults reporting sexual activity over a month long period. No statistically significant relationship was seen between knowledge and safe sex for those sexually active over the past year and past month. Young adults with high levels of knowledge were no more likely to practice safe sex than those with low levels of knowledge.

There was no significant relationship between belief about AIDS importance, as measured by a three-point likert scale and groupings related to importance scores, and the practice of safe sex for those sexually active over the past year and past month. Young adults who placed a higher importance on AIDS compared to other life issues were no more likely to practice safe sex than those who placed lower importance on AIDS. There was no significant relationship between belief about personal vulnerability, as measured on a five-point likert scale and safe sex practice. Young adults who believed themselves to be at higher vulnerability were no more likely to practice safe sex than their counterparts who believed themselves to have low/no vulnerability to HIV and AIDS.

No statistically significant relationship was found between gender and each of the following: knowledge about HIV transmission, knowledge about AIDS, knowledge about self-protective actions, beliefs about AIDS importance and belief about personal vulnerability. Males were as knowledgeable as females about HIV transmission, AIDS disease and self-protective actions. Beliefs about AIDS importance and personal vulnerability were similar for both males and females. In addition, prior STD experience was not found to be related to safe sex practice. Those with prior STD experience were no more likely to practice safe sex than those who reported never having experience with an STD. Finally, there was negligible association or relationship between: knowledge about transmission and self-protective actions; knowledge about transmission and belief

about importance; and knowledge about AIDS disease and beliefs about importance. A weak, positive relationship, however, was seen between knowledge about HIV transmission and knowledge about AIDS. Those who were more knowledgeable about HIV transmission tended to be more knowledgeable about AIDS disease.

Analysis of ethnographic data revealed a number of themes representative of contextual factors associated with AIDS-related knowledge, beliefs and sexual practices as assessed by the survey. The findings are consistent with reported findings from other studies that involve a qualitative assessment of contextual factors related to sexual transmission of HIV and AIDS. Young adults were perceived as individuals who fostered misconceptions about HIV transmission, the character of AIDS disease, recommended self-protective measures, disease importance and personal vulnerability, regardless of high levels of knowledge of and correct beliefs about HIV and AIDS. Misconceptions about HIV transmission were tied to knowledge and cultural beliefs about the etiology of illness and disease in Jamaica. In addition, young adults still believe AIDS is a homosexual disease.

Recommended self-protective measures such as sexual abstinence and monogamy conflict with health beliefs about sex and cultural norms about mating. Culturally rooted health practices are being utilized in addition to recommended protective actions. Daily social and economic pressures faced by young adults rank higher in importance than AIDS. Young adults are in denial about their personal vulnerability to HIV. When they do acknowledge the possibility, they adopt an attitude of fatalism. Several factors influence the use of condoms during sex. Young adults view sex with a condom as unnatural, disruptive to sexual pleasure and uncomfortable. However, some young adults

use condoms to facilitate penetration during sexual intercourse. The decision to use or not to use condoms is affected by the level of trust and the type of relationship between sexual partners. Whereas trust in the fidelity of a partner motivates sex without condoms, distrust influences use. Males in particular prefer to use condoms with outside partners such as girlfriends rather than with steady partners, such as wives.

A request for condom use by a partner implies promiscuity and unfaithfulness. Pressure from a sexual partner may influence the decision not to use a condom. Females may respond to male pressure to prove love by having sex without a condom. Social class influences the consistent use of condoms during sex. Young adults belonging to upper social groups are more likely to use condoms during sex. Condoms are preferably used for pregnancy prevention rather than for STD prevention. Finally, religious beliefs pertaining to procreation prohibit use of condoms by young adults.

In terms of condom resources within the community, condoms are widely available to young adults. They can be acquired either for free or at minimal cost. However, condom access is limited by fear, embarrassment, and condom location within points of acquisition. A variety of strategies have been used to inform young adults and the community about HIV/AIDS and prevention. These include AIDS community campaigns, health education in schools and youth clubs, community marches as well as the use of peers motivators who are trained by the National Family Planning Board. The success of these prevention strategies have been limited by the following factors: economic pressure caused by poverty that force young adults to have sex for money; social issues such a lack of recreational activities that provide social outlet for young adults; psychosocial issues such as low self-esteem that leads to unprotected sex with someone professing love; lack

of participation by community leaders and the health care establishment in AIDS education; poor attitudes of the church community towards condom promotion; and low educational levels of community members which hamper information dissemination .

Organizers of HIV/AIDS prevention, however, are willing to confront these limitations by exploring and utilizing alternate health education methods that encourage participation from young adults and other community members. These methods include: role playing; discussion (“rap” sessions coupled with videos and lectures; continued use of “male motivators” to educate peers by giving out condoms and informational leaflets; and community presentations that include use of charts, models and humor. The PEN-3 assessment of the cultural appropriateness of beliefs and sex practices placed themes in the context of being positive, existential and negative. Positive themes such as the high levels of knowledge and the willingness to explore alternate health education strategies represent this component. The belief that “obeah” causes AIDS represents an existential theme. Finally, nonuse of condoms because of fear of accusation and lack of condom accessibility at points of acquisition represent negative themes.

### Conclusions

The survey served to answer two questions: (1) What are the AIDS-related knowledge, beliefs and sexual practices of young adults in Eastern rural Jamaica and (2) Is there a relationship between knowledge, beliefs and selected practices. Analysis of the survey data justify the following conclusions.

1. Young adults in rural St. Thomas show high levels of knowledge about HIV transmission, AIDS as disease and self-protective measures. Furthermore, levels of knowledge were high regardless of gender.
2. Notwithstanding these high levels of knowledge, misconceptions about modes of HIV transmission, AIDS disease and methods of protection continue to persist among a minority of young adults.
3. Young adults place virtually equal importance on AIDS as they do on other life issues. In addition, males do not differ from females in their ranking of importance of AIDS.
4. Majority of young adults perceive themselves as having little or no vulnerability to HIV and AIDS. Also, perception of vulnerability is not related to the gender of the individual.
5. Sexually experienced young adults primarily participated in vaginal sex. Oral and anal sex are virtually non-existent in this population.
6. There is no difference in knowledge and beliefs between young adults who practice safe sex, compared to those who do not. Higher knowledge of transmission, disease and protection is not associated with tendency to practice safe sex. In addition, higher importance placed on AIDS, and higher vulnerability to HIV are not associated with safer sex practice.
7. There is no difference in safe sex practice of those who had prior STD experience and those who do not.



8. High levels of knowledge of HIV transmission, AIDS disease, self-protective actions as well as a higher level of importance on AIDS did not, by themselves, allow young adults to accurately assess their own vulnerability to HIV and AIDS.

The rapid ethnographic assessment served to answer the following question: What does a rapid ethnographic assessment of community perceptions and selected enablers reveal about the nature and context of AIDS-related knowledge, beliefs and sexual practices? Analysis of the ethnographic data justify the following conclusions.

1. Ethnographic field methods such as key informant interviewing and participant observation are useful in enhancing the numerical data presented in the survey and for clarifying discrepancies in the data. Contradictions between responses to the questionnaire and to interviews are clarified through this triangulation of methods.
2. Prior knowledge and cultural beliefs about etiology of endemic disease and illness play a role in the persistence of misconceptions about HIV and AIDS among young adults.
3. Recommended protective measures that conflict with health beliefs about sex and cultural norms about mating negatively influence decision to adopt HIV/AIDS preventive behaviors among young adults.
4. Denial and fatalism play a role in the underestimation of personal vulnerability.
5. Decision to use condoms is influenced by distrust and relationship issues, pregnancy prevention concerns, wide availability and inexpensiveness of condoms, exposure to prior prevention efforts and increasing involvement of community leaders.

6. Decision to use condoms is negatively influenced by trust and relationship issues; higher deference to pregnancy prevention than STD prevention, prohibitive religious beliefs, and condom inaccessibility due to fear, embarrassment and poor location.
7. Sociocultural and economic pressures, psychosocial issues, poor community participation and attitudes and low literacy levels limit the success of HIV/AIDS prevention education designed to effect behavior change.

The results of this study came from a survey done on 58 young adults, and an ethnographic assessment involving 17 key informants and participant observation sites located within Eastern rural Jamaica. Clearly this small sample size and the research location restricts any generalization of results to the larger young adult population as a whole and may severely curtail comparison with other countries in the English-speaking Caribbean. On the other hand, the relatively good representation of participants and observation sites from the parish of St. Thomas may permit the tentative drawing of conclusions at the regional level. That is, the findings may be generalizable only to young adults in the other eastern parishes of Jamaica, who share similar cultural and structural characteristics as those participating in the study. In addition, the limitations of the survey instrument, survey and ethnographic methods of data collection and analysis used in this study should not diminish the magnitude of the evidence presented regarding knowledge, beliefs and sexual practices.

A glance at previous research done in Jamaica show that the study population behaved similar to their national counterparts in most respects (National Family Planning Board, 1988; McFarlane, Friedman & Morris, 1994). The levels of knowledge and beliefs

were similar, as were their patterns of sexual behavior. It is clear however, from the lack of significant relationships found on all levels knowledge, beliefs and practices that knowledge and beliefs alone will not lead to protective behavior, in this case consistent use of a condom during sexual activity among this group. In addition, prior STD experience still had no significant bearing on safe sex practice. Although none of the national studies look closely at the correlation or associations of these variables, a few studies in other Caribbean countries. A comparative KABP study done between St. Vincent and St. Lucia found that despite religious, socioeconomic, and literacy differences citizens of both countries, including those in the 20 to 24 year old range, high levels knowledge about HIV and AIDS and similar beliefs about AIDS importance and personal vulnerability. In addition, although condoms were used during sex to some extent, their use/nonuse was not shown to be significantly linked to knowledge and beliefs. Gender differences in these entities were also not significant enough to warrant a conclusion related to cause and effect.

Although knowledge and beliefs are key factors that play a role in safe sex practice, they represent only a fraction of those that would influence a decision or intention to practice safe sex. Green & Kreuter (1991) have conclusively proven that sociocultural as well as environmental factors are equally as strong an influence as knowledge and beliefs. This study, in qualitatively looking at these specific factors show why it would be unrealistic to expect mere knowledge and belief to lead to behavior. Unless these other factors, particularly those that present stronger influences on sexual behavior can effectively be manipulated, then young adults may continue to increase their personal vulnerability via unsafe practices.

### Recommendations

It seems timely for HIV/AIDS prevention professionals who are attempting to influence vulnerability behavior to make use of theoretically driven analyses of knowledge, beliefs and practices in their program planning, both in needs assessment and in the strategies they employ. Data on knowledge, beliefs and practices should ideally be coupled with contextual data pertinent to the targeted group and their community, as this permits the planning of more effective programs that will be more culturally and structurally relevant. Permanent changes in detrimental or negative behaviors can rarely be brought about solely by direct attacks on cultural belief systems. Consideration for and manipulation of the cultural and structural systems within the community would greatly enhance the likelihood of achieving this goal. Indeed, it would be more prudent when targeting individuals for prevention to couple these efforts with intervention to also at the community or societal level.

It is evident from this study that multiple factors influence sexual behavior that increases young adult vulnerability to HIV and AIDS. The study also highlighted several variables which together could increase safe sex practices among young adults. These factors could be used in HIV/AIDS prevention among young adults in Eastern rural Jamaica. With this in mind, the following recommendations are made.

1. AIDS-related knowledge, beliefs and sexual practices of young adults need to be further explored in the context of the structural and cultural environment in which they occur. Specifically, this type of exploration should include:
  - more quantitative as well as qualitative research on these issues

- studies that include larger samples of young adults and key informants
  - more empirical studies that utilize the PEN-3 model as a conceptual framework
  - studies that include more enhanced theoretical approaches that are designed to the predictive nature of the contextual variables uncovered from exploratory assessments.
  - studies that utilize more advanced statistical analyses of variables
2. Since young adults are more likely to underestimate their personal vulnerability to HIV and AIDS, more exploration needs to be done to assess the psychosocial and cultural factors involved in this process.
  3. Further studies need to be done with young adults who consistently use condoms during sex.
  4. Studies need to be done looking at condom use as it relates to partnering/mating patterns.
  5. HIV/AIDS intervention programs for behavior change among young adults must begin to address the social and economic complexities of their daily lives. Specifically, these programs can include:
    - Educational components tailored to the literacy levels of the community that would resolve misconceptions and misbeliefs
    - components that encourage discussion of personal feelings about HIV and AIDS, self-protection and condoms
    - Instruction on condom application that includes specific information on how to make use of condoms more pleasurable

- Utilization of more persuasive forms of communication such as group sessions that help young adults build upon social skills needed for communicating and negotiating sex and condom use. Males should be included as part of these groups.
- Involvement of family, church, the health care, educational and business sectors in the planning and delivery of strategies designed to promote not only HIV/AIDS prevention, but also social and economic empowerment as among young adults.
- Environmental manipulation which may include efforts such as the repositioning of condoms within local points of acquisition.

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APPENDIX A  
AIDS-RELATED KNOWLEDGE, BELIEFS AND SEXUAL PRACTICES PILOT  
SURVEY FOR YOUNG ADULTS

STRUCTURED INTERVIEW

Respondent number: \_\_\_\_\_  
Respondent sex: Male \_\_\_\_\_ Female: \_\_\_\_\_  
Place of Interview: \_\_\_\_\_  
Date of Interview: \_\_\_\_\_  
Interview Start Time: \_\_\_\_\_  
Interview End Time: \_\_\_\_\_

Dear Sir/Madam,

My name is Sharon Morrison and I am currently a health education graduate student at the University of Florida. I am conducting a survey for my doctoral research project to try to identify the types of sexual practices and the personal beliefs about AIDS of young people in the Morant Bay area. The information I gain will help the individuals responsible for planning economic and social development programs for young people such as yourselves, as well as community public health professionals, to develop health education for the prevention of AIDS in the community.

This survey interview has questions that have to do with personal background, your personal beliefs regarding AIDS, and the past and present sexual practices that you engage in. Some of these questions are about events that took place a long time ago; other questions may generate feelings that may embarrass you, or seem silly and stupid. There are no right or wrong answers to these questions. Please answer as honestly as you can. Feel free to stop me if you do not understand any questions, particularly if I use words or terms that are unfamiliar to you. Also, you do not have to answer any question you do not wish to. This information will be confidential at all times. Any answers you give will be treated with the strictest confidence and your name will not be connected with the findings.

Should you have any immediate concerns or questions, I can be contacted through:

Office of the Medical Officer	<u>OR</u>	Department of Health Science Education
c/o Public Health Department		Room 5, FLG
54 Lyssons Road		PO Box 118210
Morant Bay, St. Thomas		University of Florida
Jamaica		Gainesville, FL 32611-8210
(809) 982-1619 or 982-1630		(352) 392-0583

Thank you for your kind co-operation.

SECTION A:

BACKGROUND CHARACTERISTICS

In this section, I would like to obtain information regarding your background. Some of the questions are personal. Feel free to stop me at anytime if you have any questions regarding the issues in this section. Any information you give will be held in the strictest confidence.

Thank you.



BACKGROUND CHARACTERISTICS

In this section, I would like to get an idea of your personal background.

Age

1. How old are you now?  
\_\_\_\_\_ years

Education

2. What is the highest level of education that you have attained, at school?
1. No school \_\_\_\_\_
  2. Primary \_\_\_\_\_
  3. All age \_\_\_\_\_
  4. Secondary/High \_\_\_\_\_
  5. Vocational/Trade \_\_\_\_\_
  6. Secretarial \_\_\_\_\_
  7. Teachers College \_\_\_\_\_
  8. University/Community College \_\_\_\_\_
  9. JAMAL \_\_\_\_\_
  10. Other (specify) \_\_\_\_\_

Geographic Origin

3. Were you raised in ST. Thomas?
1. Yes \_\_\_\_\_ Go to No. 5
  2. No \_\_\_\_\_
4. What parish or place were you raised in?  
\_\_\_\_\_
5. Where are you living now?  
\_\_\_\_\_
6. With whom do you live?
1. family \_\_\_\_\_
  2. extended family/relative(s) \_\_\_\_\_
  3. boyfriend/girlfriend \_\_\_\_\_
  4. partner(common-law/ legal husband/wife) \_\_\_\_\_
  5. friends \_\_\_\_\_
  6. Other (specify) \_\_\_\_\_

Religious affiliation

7. What is your religion or denomination?
1. Anglican \_\_\_\_\_
  2. Roman Catholic \_\_\_\_\_
  3. Baptist \_\_\_\_\_
  4. Methodist \_\_\_\_\_
  5. Brethren \_\_\_\_\_
  6. Church of God \_\_\_\_\_
  7. Pentecostal \_\_\_\_\_
  8. Seventh Day Adventist \_\_\_\_\_
  9. Rastafarian \_\_\_\_\_
  10. Muslim \_\_\_\_\_
  11. None \_\_\_\_\_
  12. Other (specify) \_\_\_\_\_

8. Do you ever go to church or meetings related to your religion?

1. Yes \_\_\_\_\_
2. No \_\_\_\_\_

9. How religious would you say you are?

1. Very religious \_\_\_\_\_
2. Moderately religious \_\_\_\_\_
3. Slightly religious \_\_\_\_\_
4. Not religious at all \_\_\_\_\_
5. Not sure \_\_\_\_\_

#### Social and/or Economic Development Program Involvement

10. Are you currently participating in a youth development or training program?

1. Yes \_\_\_\_\_
2. No \_\_\_\_\_ Go to No. 14

11. What program activity(ies) are you currently involved in?

\_\_\_\_\_

\_\_\_\_\_

12. What do you plan to do after you finish your program?

1. \_\_\_\_\_
2. \_\_\_\_\_

13. What were you doing before you got involved with the program?

1. \_\_\_\_\_
2. \_\_\_\_\_

#### STD experience

14. Have you ever had a sexually transmitted diseases (STD) or venereal disease (VD)?  
That is, a disease or illness related to your sexual parts.

1. Yes \_\_\_\_\_
2. No \_\_\_\_\_ Go to Section B.

15. What was the name or type of the disease(s) or illness(es)?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

SECTION BAIDS-RELATED BELIEFS

This section of the survey has questions that have to do with what you know and believe about AIDS and the AIDS virus. The information you present will be kept in the strictest confidence.

Thank you.

AIDS-RELATED BELIEFS

I'd like to find out about your thoughts and beliefs regarding AIDS disease and the AIDS virus.

16. Have you ever heard of the AIDS virus or HIV?

1. Yes \_\_\_\_\_  
2. No \_\_\_\_\_

17. Have you ever heard of AIDS disease?

1. Yes \_\_\_\_\_  
2. No \_\_\_\_\_ Go to Section C.

18. How did you first hear about the AIDS virus (HIV) and/or AIDS disease?

(Indicate all that apply)

1. On the TV \_\_\_\_\_  
2. On the radio \_\_\_\_\_  
3. In the newspaper \_\_\_\_\_  
4. From a friend \_\_\_\_\_  
5. At school \_\_\_\_\_  
6. A relative/family member \_\_\_\_\_  
7. At a hospital/clinic \_\_\_\_\_  
8. Other (specify) \_\_\_\_\_

Beliefs about HIV (AIDS virus) Transmission

19. Which of the following activities do you believe can cause a person to get the AIDS virus? (Indicate all that apply)

1. Shaking hands or hugging \_\_\_\_\_  
2. Sharing drug needles \_\_\_\_\_  
3. Sharing a home or other living space \_\_\_\_\_  
4. Sharing a classroom, office or other work environment \_\_\_\_\_  
5. Receiving a blood transfusion \_\_\_\_\_  
6. Having sex with a homosexual or bisexual man \_\_\_\_\_  
7. Sexual intercourse between men and women \_\_\_\_\_  
8. Being bitten by an insect (e.g. mosquito) that has bitten someone with the AIDS virus \_\_\_\_\_  
9. Sharing personal items like dishes, cups, forks \_\_\_\_\_  
10. Having sex with an animal \_\_\_\_\_

20. Are there any other ways a person can get the AIDS virus?

\_\_\_\_\_

Beliefs about AIDS disease

21. What do you think about the following statements about AIDS Disease?

	<u>True</u>	<u>False</u>	<u>Could be true</u>	<u>Don't know</u>
1. You can always tell a person has AIDS disease by looking at them	1	2	3	4
2. AIDS is a preventable disease	1	2	3	4
3. AIDS is a homosexual disease	1	2	3	4
4. In Jamaica, most people with AIDS disease are heterosexual	1	2	3	4
5. AIDS is a curable disease	1	2	3	4
6. Men can't get AIDS from women	1	2	3	4
7. A person's sexual practice has little to do with whether or not they get AIDS.	1	2	3	4
8. Some people can be infected with the AIDS virus for years and still show no outward signs of AIDS disease.	1	2	3	4

Beliefs about AIDS Self-Protective Actions

22. Please tell me how well you think each the following actions can protect you and reduce the risk that you can get the AIDS virus.

	<u>VERY WELL</u>	<u>FAIRLY WELL</u>	<u>NOT AT ALL</u>	<u>DONT KNOW</u>
1. Avoid kissing people not known well	1	2	3	4
2. Refusing a blood transfusion	1	2	3	4
3. Avoid using public toilets	1	2	3	4
4. Avoid being bitten by mosquitos	1	2	3	4
5. Not having sex with unclean-looking people	1	2	3	4
6. Using a condom during sex	1	2	3	4
7. Not having any sex at all	1	2	3	4
8. Stick to one partner who is faithful to you alone	1	2	3	4
9. Avoid sex with a homosexual or bisexual.	1	2	3	4
10. Avoid having sex with someone you know has the AIDS virus	1	2	3	4

Beliefs about the importance of AIDS

23. How much of a problem is AIDS compared to other problems in your life? For each problem, please tell me whether it is more important than AIDS, less important than AIDS, or equally as important as AIDS.

	<u>LESS IMPORTANT</u>	<u>EQUALLY IMPORTANT</u>	<u>MORE IMPORTANT</u>
1. Not having good health	1	2	3
2. Economic problems	1	2	3
3. Poverty	1	2	3
4. Not having enough money	1	2	3
5. Crime	1	2	3
6. Being sick	1	2	3
7. Trouble with children	1	2	3
8. Having mental problems	1	2	3
9. Problems in the relationship	1	2	3
10. Illiteracy	1	2	3

24. Are there any other problems you can think of that are more important than AIDS?  
Please Specify \_\_\_\_\_

#### Beliefs about Personal Vulnerability to HIV/AIDS

25. What would you say are the chances that you could get HIV and AIDS?  
Would you say that you have:

1. A very strong chance \_\_\_\_\_
2. A strong chance \_\_\_\_\_
3. Some chance \_\_\_\_\_
4. Not much chance \_\_\_\_\_
5. No chance at all \_\_\_\_\_

26. Why do you believe this? \_\_\_\_\_

#### SECTION C

#### SEXUAL PRACTICES

The questions in this section have to do with some of the sexual practices you participate in. I understand that some of the questions are private and sensitive and may embarrass you. Therefore, you can either privately refer (point) to the appropriate responses on the cue cards OR if you feel comfortable enough, we can go through this section together. Please feel free to ask if there is a question or issue you are not sure about. The information you reveal here will be kept in the strictest confidence.

Thank you

#### SEXUAL PRACTICES

I'd like to ask you about the sexual experiences that you have had. Some of these experiences may have happened a long time ago, others may be with your current partner(s). If you have trouble remembering, please let me know. Many people have different experiences, and this interview is designed for all types of people and sexual experiences in Jamaica.

VAGINAL INTERCOURSE or VAGINAL SEX is when [FOR WOMEN] someone puts his penis in your vagina?  
Or [FOR MEN] when you put your penis in someone's vagina?

27. Have you ever had vaginal intercourse/vaginal sex?

1. Yes \_\_\_\_\_ Go to No. 29
2. No \_\_\_\_\_

28. Why have you never had vaginal intercourse/vaginal sex? (Go to No. 33)

29. Think about the first time you had vaginal intercourse/vaginal sex. Did you or your partner use a condom?

1. Yes \_\_\_\_\_ Go to No. 31
2. No \_\_\_\_\_

30. Why didn't you or your partner use a condom?

31. Think about the last time you had vaginal intercourse/ vaginal sex. Did you or your partner use a condom?

1. Yes \_\_\_\_\_ Go to No. 33  
2. No \_\_\_\_\_

32. Why didn't you or your partner use a condom?

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These questions have to do with some other types of sexual practices you engage in.

Oral intercourse or Oral sex is when (you/your sex partner) puts (your/their) mouth on (your sex partner's/your) vagina/penis. Anal intercourse or Anal sex is when (you/your sex partner) puts (your/their) penis into (their/your) anus or bottom.

33. Have you ever had oral or anal sex?

- Oral sex: 1. Yes \_\_\_\_\_ Go to No. 35      Anal sex: 1. Yes \_\_\_\_\_ Go to No. 35  
2. No \_\_\_\_\_      2. No \_\_\_\_\_

34. Why have you never had oral or anal sex? (Go to ENDNOTE)

Oral: \_\_\_\_\_  
Anal: \_\_\_\_\_

35. Think about the first time you had oral or anal sex. Did you or your partner use a condom?

- Oral sex: 1. Yes \_\_\_\_\_ Go to No. 37      Anal sex: 1. Yes \_\_\_\_\_ Go to No. 37  
2. No \_\_\_\_\_      2. No \_\_\_\_\_

36. Why didn't you or your partner use a condom?

Oral sex: \_\_\_\_\_  
Anal sex: \_\_\_\_\_

37. Think about the last time you had oral or anal sex. Did you or your partner use a condom?

- Oral sex: 1. Yes \_\_\_\_\_ Go to No. 39      Anal sex: 1. Yes \_\_\_\_\_ Go to No. 39  
2. No \_\_\_\_\_      2. No \_\_\_\_\_

38. Why didn't you or your partner use a condom?

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I'd like to ask you about your sexual practices over the past year.

39. Did you have vaginal intercourse/vaginal sex over the past year?

1. Yes \_\_\_\_\_  
2. No \_\_\_\_\_ Go to No. 42

40. Over the past year, when you did have vaginal intercourse/vaginal sex, how often did you use a condom?

1. Never \_\_\_\_\_  
2. Hardly ever \_\_\_\_\_  
3. Sometimes \_\_\_\_\_  
4. Most of the time \_\_\_\_\_  
5. Always \_\_\_\_\_

41. Over the past year, how often did you have vaginal intercourse/vaginal sex without using a condom?

1. Never \_\_\_\_\_
2. Hardly ever \_\_\_\_\_
3. Sometimes \_\_\_\_\_
4. Most of the time \_\_\_\_\_
5. Always \_\_\_\_\_

42. Did you have oral or anal intercourse/oral or anal sex over the past year?

- Oral sex: 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ Go to No. 45
- Anal sex: 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ Go to No. 45

43. Over the past year, when you have had oral or anal intercourse/oral or anal sex, how often did you use a condom?

- Oral sex: 1. Never \_\_\_\_\_ 2. Hardly ever \_\_\_\_\_ 3. Sometimes \_\_\_\_\_ 4. Most of the time \_\_\_\_\_ 5. Always \_\_\_\_\_
- Anal sex: 1. Never \_\_\_\_\_ 2. Hardly ever \_\_\_\_\_ 3. Sometimes \_\_\_\_\_ 4. Most of the time \_\_\_\_\_ 5. Always \_\_\_\_\_

44. Over the past year, often did you have anal or oral intercourse/oral or anal sex without using a condom?

- Oral sex: 1. Never \_\_\_\_\_ 2. Hardly ever \_\_\_\_\_ 3. Sometimes \_\_\_\_\_ 4. Most of the time \_\_\_\_\_ 5. Always \_\_\_\_\_
- Anal sex: 1. Never \_\_\_\_\_ 2. Hardly ever \_\_\_\_\_ 3. Sometimes \_\_\_\_\_ 4. Most of the time \_\_\_\_\_ 5. Always \_\_\_\_\_

Now, I'd like to ask about your sexual practices over the past month.

45. Did you have vaginal intercourse/vaginal sex over the past month?

1. Yes \_\_\_\_\_
2. No \_\_\_\_\_ Go to No. 48

46. Over the past month, when you did have vaginal intercourse/vaginal sex, how often did you use a condom?

1. Never \_\_\_\_\_
2. Hardly ever \_\_\_\_\_
3. Sometimes \_\_\_\_\_
4. Most of the time \_\_\_\_\_
5. Always \_\_\_\_\_

47. Over the past month, how often did you have vaginal intercourse/vaginal sex without using a condom?

1. Never \_\_\_\_\_
2. Hardly ever \_\_\_\_\_
3. Sometimes \_\_\_\_\_
4. Most of the time \_\_\_\_\_
5. Always \_\_\_\_\_

48. Did you have oral or anal intercourse /oral or anal sex over the past month?

- Oral sex: 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ Go to ENDNOTE
- Anal sex: 1. Yes \_\_\_\_\_ 2. No \_\_\_\_\_ Go to ENDNOTE

49. Over the past month, when you did have oral or anal intercourse/oral or anal sex, how often did you use a condom?

- Oral sex: 1. Never \_\_\_\_\_ 2. Hardly ever \_\_\_\_\_ 3. Sometimes \_\_\_\_\_ 4. Most of the time \_\_\_\_\_ 5. Always \_\_\_\_\_
- Anal sex: 1. Never \_\_\_\_\_ 2. Hardly ever \_\_\_\_\_ 3. Sometimes \_\_\_\_\_ 4. Most of the time \_\_\_\_\_ 5. Always \_\_\_\_\_

50. Over the past month, how often did you have anal or oral intercourse/oral or anal sex without using a condom?

- |           |                           |           |                           |
|-----------|---------------------------|-----------|---------------------------|
| Oral sex: | 1. Never _____            | Anal sex: | 1. Never _____            |
|           | 2. Hardly ever _____      |           | 2. Hardly ever _____      |
|           | 3. Sometimes _____        |           | 3. Sometimes _____        |
|           | 4. Most of the time _____ |           | 4. Most of the time _____ |
|           | 5. Always _____           |           | 5. Always _____           |

ENDNOTE

Thank you very much for your time. I know that there a great deal more things that we did not cover in this survey, but that are important to us understanding the beliefs and sexual practices related to AIDS.

Would you object if I were to return some other time to have a deeper discussion with you?

1. Yes, I would object \_\_\_\_\_
2. No, I have no objections \_\_\_\_\_

When would be a good time to talk further with you? \_\_\_\_\_

Where would be a good place for us to meet and talk? \_\_\_\_\_

Thank you.



APPENDIX B  
INFORMED CONSENT

## ORAL CONSENT FORM PILOT SURVEY AND CORRESPONDING IN-DEPTH INTERVIEWS

My name is Sharon Morrison and I am conducting a study related to young people in the community. I would like to read to you the consent to take part in this study. I would also like to audio-record this pre-interview portion. May I have your permission to audio-record our conversation?

The purpose of the study is to explore and describe the sexual practices and the AIDS-related beliefs among the young people in the community. As a person taking part in this study, you will be requested to participate in a series of interviews which will range anywhere from 30 minutes to one and a half hours. The first interview will be a face-to-face survey interview which covers a variety of areas including: personal characteristics, sexual practices and beliefs related to HIV transmission, AIDS self-protective actions, personal vulnerability to HIV/AIDS, and the relative importance of AIDS to other life issues. This interview will last approximately 30 minutes. The second series of interviews will investigate in more detail, some of the issues presented in the first interview. I would like to audio-record these interviews. May I have permission to audio-record our conversation during the interviews?

I do not anticipate any risks as a consequence of you participating in this study, though personal information regarding sexual activity is sensitive and uncomfortable. The potential benefits of this study is the opportunity to express your personal perspectives about HIV and AIDS, and about how these issues affect your personal behaviors. No monetary remuneration will be given for this study. You do not have to answer any question you do not wish to answer. Your statements and comments will be kept in the strictest of confidence, and your identity will be kept separate from any information you may offer. Each audio-recorded interview will be transcribed and a number will be assigned any resulting written documents. An alternative name will be assigned to you during the interviews for the study. Your comments will be presented anonymously in any write-up and presentation of this study. Your decision to participate in this study is strictly voluntary. You are free at any time to discontinue participation in this study without any consequence to you as participant. Should you choose to do this, I will erase the corresponding audio tape and not use the resulting transcript for this or any other study. I will be more than happy to answer any questions you may have regarding the procedures as well as anything else regarding this study. Do you understand the procedures that I have read to you? Do you have any questions regarding anything to do with this study? Do you agree to take part in this study?

Audio tapes will be assigned specific numbering (e.g. AD0001) and will be filed and stored (i.e. in a locked file cabinet) separately from transcriptions. Only myself and members of my doctoral committee at the University of Florida, will have access to the audio-tapes and resulting transcriptions. You as participant will have access to your own audio-taped interview and the resulting transcription. The information I gain will be used to help members of the medical and public health community, youth program planners and youth and community organization leaders to develop health education programs for AIDS prevention among young adults in the community. Should you have any immediate concerns or questions regarding your rights as a participant, you can direct them to: UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250. I can also be contacted at:

**Office of the Medical Officer  
Public Health Department  
54 Lyssons Road  
Morant Bay, St. Thomas  
982-1619 or 982-1630**

**OR**

**Department of Health Science Education  
Room FLG-5  
University of Florida  
Gainesville, FL 32611  
(352) 392-0583**

## ORAL CONSENT FORM

### IN-DEPTH INTERVIEWS WITH PROFESSIONALS, COMMUNITY LEADERS AND BROKERS

My name is Sharon Morrison and I am conducting a study related to young people in the community. I would like to read to you the consent to take part in this study. I would also like to audio record this pre-interview portion. May I have your permission to audio-record our conversation?

The purpose of the study is to explore and describe the sexual practices and the AIDS-related beliefs virus among the young adults in the community. As a person taking part in this study, you will be requested to participate in one or more informal interviews. These interviews will cover a variety of areas including: perceptions regarding AIDS, the sexual conduct of young adults, AIDS information sources, HIV/AIDS prevention in the community, and condom acceptability, availability and accessibility. The interviews will last approximately 15 to 45 minutes. I would like to audio-record these interviews. May I have permission to audio-record our conversation during the interviews?

I do not anticipate any risks as a consequence of you participating in this study, though personal information regarding sexual activity is sensitive and uncomfortable. The potential benefits of this study is the opportunity to express your personal perspectives about HIV and AIDS, and about how these issues affect young adults in your community. No monetary remuneration will be given for this study. You do not have to answer any question you do not wish to answer. Your statements and comments will be kept in the strictest of confidence, and your identity will be kept separate from any information you may offer. Each audio-recorded interview will be transcribed. A number will be used on any resulting written documents and an alternative name will be assigned during the interviews for the study. Your comments will be presented anonymously in any write-up and presentation of this study. Your decision to participate in this study is strictly voluntary. You are free at any time to discontinue participation in this study without any consequence to you as participant. Should you choose to do this, I will erase the corresponding audio tape and not use the resulting transcript for this or any other study. I will be more than happy to answer any questions you any have regarding the procedures as well as anything else regarding this study. Do you understand the procedures that I have read to you? Do you have any questions regarding anything to do with this study? Do you agree to take part in this study?

Audio tapes will be assigned specific numbering (e.g. AD0001) and will be filed and stored (i.e. in a locked file cabinet) separately from transcriptions. Only myself and members of my doctoral committee at the University of Florida, will have access to the audio-tapes and resulting transcriptions. You as participant will have access to your own audio-taped interview and the resulting transcription. The information I gain will be used to help members of the medical and public health community, youth program planners and youth and community organization leaders to develop health education programs for AIDS prevention among young adults in this community. Should you have any immediate concerns or questions regarding your rights as a participant, you can direct them to: **UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250.** I can also be contacted at:

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University of Florida  
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(352) 392-0583**

Thank you for your kind assistance.

APPENDIX C  
AIDS RAP INTERVIEW GUIDES

## GUIDE FOR USE WITH COMMUNITY PARTICIPANTS OR BROKERS

### AIDS Knowledge and Beliefs

1. Have you ever heard of AIDS? How long ago did you hear about it? Do you know what happens to people/young people who get AIDS?
2. Have you ever seen a person/young person with AIDS? How did you know he/she had AIDS?
3. Do you know anyone with AIDS? Have they talked about their AIDS with you? What was talked about? Do their relatives and friends know this person has AIDS? What do they say about this person with AIDS? If they do not talk about AIDS, why not? How do you think the family acts toward the person with this condition?
4. What do you think about people who have AIDS?
5. Do you think that medical care should be made available to all people with AIDS? Why/why not?
6. Have you ever seen a movie, watched something on television, read something, or heard a radio program about AIDS? Have you ever taken a class where someone taught about AIDS? If yes, what kind of class was it? Where were class meetings held? Who taught the class? How did this person know about AIDS (physician, nurse, health educator, person with AIDS, etc.)?
7. Have there been any AIDS education efforts in your city (neighborhood)? What were they? Did they help people in your community learn about AIDS? Did they teach you what to do in order to protect yourself from getting AIDS? Why were they successful?/Why weren't these efforts successful?
8. What do you think needs to be done in your community to prevent the spread of AIDS? (AIDS prevention education programs, distribution of safer sex materials, distribution of clean needles/bleach, mandatory AIDS testing, etc.)

**GUIDE FOR USE WITH PROFESSIONALS AND COMMUNITY LEADERS****AIDS Knowledge and Beliefs**

1. How do people/young people find out about AIDS?
2. What are the religious, social, legal, and/or political consequences of contracting AIDS in this culture/community? What kinds of social difficulties occur to family members of the individual with AIDS? What kinds of social difficulties occur to friends of the individual with AIDS?
3. What kind of priority is AIDS given in relation to other health care problems in the community?
4. Is AIDS of serious concern to the people/young people who live in this community?
5. How does AIDS relate to the daily survival needs and concerns of the people/young people in this community? To the local government? To the biomedical health care system? To the alternative health care system?
6. What are the common beliefs that people/young people in this community have about AIDS? About HIV? Do any of the beliefs agree with biomedical data about the virus? Do the beliefs agree with native ideas about health and illness?
7. How do beliefs about AIDS differ by Age? Gender? Religion? Educational level? Literacy level?
8. Have there been AIDS education campaigns in this community? How effective were they? How was this effectiveness measured in the short term? In the long run? What factors are the most important to consider when developing an AIDS prevention program for target populations at risk in this community?
9. How many people/young people in this community have been infected with the HIV virus? How many have HIV related disease? How many have AIDS? What are the demographics of the AIDS epidemic in this community?

## GUIDE FOR USE WITH PROFESSIONALS, COMMUNITY LEADERS, COMMUNITY PARTICIPANTS OR BROKERS

### Norms for Young Adult Sexual Activity with Condoms

1. What do young men and young women know about condoms? Do they know where to buy condoms? Do they see condoms as being important enough to allot resources for them (money, time, barter, etc.)? What do they think condoms are used for?
2. Do they know how to use them? Do they know when to put the condom on? When to take it off? How to keep it from breaking?
3. Do the young men and young women in this community use condoms during sexual encounters? What kinds of sexual activities do they use condoms for (vaginal or anal intercourse, oral - penile sex, for use with certain sex toys, etc.)?
4. Do they use condoms with all their partners? How do they decide which partners to use condoms with? How do they decide when it is appropriate to let their partner know they are going to use a condom? If their partner objects, does this prevent them from insisting on using the condom? If so, do they have sexual contact with that partner anyway? Does it alter what kind of contact they will seek with that partner?
5. Do male partners ever let women partners put condoms on them? Would a woman in this community put a condom on her male partner?
6. Do religious values keep young men and young women from using condoms?
7. Do young men and young women know about other forms of safer sex practices? (Washing one's body, making sure one's partner's body is clean, checking your own and your partner's bodies for signs of insect infestation, genital or other infection, genital rashes or sores, unusual discharge from penis, mouth, anus, or vagina, using latex gloves, dental dams (safety squares), using plastic wrap?)
8. Are there any local traditional practices used that are believed to make sex safer? What are these? How do they work to protect someone from infection with HIV or the AIDS virus?

## GUIDE FOR USE WITH PROFESSIONALS AND COMMUNITY LEADERS

### Condom Resources

1. Are condoms available to young people in the community? What are the most common terms or expressions used to designate condoms?
2. How expensive are condoms? Are they available anywhere free of charge?
3. What is the current distribution system and main sale or distribution points? What is the range of prices charged? (Prices for wholesale businesses, clinics, or individuals, etc.)
4. What is the current system of advertising the sale or availability of condoms (posters, brochures, etc.) and places of advertising.
5. Are there specific regulations or legislation on promotion or distribution of condoms?
6. Are condoms promoted in the interests of contraception or for control of STD, including AIDS?
7. Are people satisfied or dissatisfied with condoms (price, quality, reduction of pleasure, reliability, etc.)?
8. Is condom use socially and culturally accepted? If not, what are the reasons for rejection?
9. What are the main obstacles to the use of condoms by young people? (beliefs, cost, availability, quality).
10. Are there specific condom education and/or resource programs for certain groups in the community (prostitutes, soldiers, students, young adults, STD patients, housewives)?



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## BIOGRAPHICAL SKETCH

Sharon D. Morrison was raised in Mandeville, Jamaica, West Indies. In 1984, at the age of 20, she and her family migrated to the United States. She completed her undergraduate training at Barry University in Miami, Florida, and received a Bachelor of Science in biology in 1988. She moved to North Carolina and worked as a Research Technician in the Department of Pathology at the University of North Carolina Medical School at Chapel Hill. She also completed a Master of Science in public health in parasitology and laboratory practice at the University of North Carolina School of Public Health, Chapel Hill, in 1990.

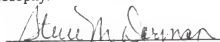
After working for two years as an Oncology Technologist in the Research Triangle Park, North Carolina, Sharon decided to return to graduate school to pursue her interests in disease prevention and health promotion, and international public health. She enrolled at the University of Florida and completed a Master of Health Science Education degree and a Certificate in Latin American Studies in 1994. She received the prestigious McKnight Doctoral Fellowship and pursued a Ph.D. in health and human performance, with a specialization in health behavior and minor in medical anthropology.

Sharon wishes to contribute her knowledge, training and wealth of experiences to broadening the scope and meaning of health and well-being for individuals, families and communities.

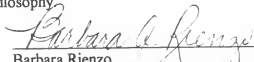
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Wei William Chen, Chair  
Professor of Health Science Education

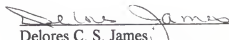
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Steve A. Dorman  
Associate Professor of Health Science  
Education


I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Barbara A. Rienzo  
Professor of Health Science Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

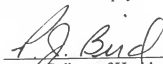
  
Delores C. S. James  
Associate Professor of Health Science  
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Allan F. Burns  
Professor of Anthropology

This dissertation was submitted to the Graduate Faculty of the College of Health and Human Performance and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1998

A handwritten signature in cursive script, appearing to read "A.J. Bird", written over a horizontal line.

Dean, College of Health and Human  
Performance

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Dean, Graduate School